CLIMATE-SMART Agriculture 2015

Global Science Conference

March 16-18, 2015
Le Corum, Montpellier France

http://csa2015.cirad.fr

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Welcome to Montpellier, Welcome to CSA 2015!

On behalf of Agropolis International, CIRAD, INRA and IRD, it is our pleasure to welcome you to Montpellier, home to a large scientific community in the fields of agriculture, food, biodiversity and the environment, with about 2700 research scientists and lecturers.

CSA 2015 is the third international conference in a successful series on Climate-smart agriculture (CSA) that was launched by Wageningen University and Research in the Netherlands, in 2011. It then moved to the University of California, Davis, USA in 2013. Over these four years, the concept of climate-smart agriculture has spread worldwide. It is now attracting the attention of many scientists, policy makers, developers, farmers, as well as other stakeholders including the public. Yet, we all know that the scientific validity of the concept needs to be fostered. To simultaneously achieve food security, adaptation and mitigation is not an easy task. Skills from all disciplines, at all scales and in diverse environments, are required.

Such is the objective of the Montpellier CSA 2015 Conference: confront expert knowledge to update the CSA science foundation, showcase key scenarios for agriculture and food systems, identify priorities for action, interface with the policy context and design a roadmap for future research on CSA.

When putting together this event over the past months, we were greatly encouraged by the huge interest from the global scientific community, with about 700 high-quality abstracts submitted, clearly showing that the global challenge of CSA is both vibrant and increasingly addressed. Strong support was also received from different organizers and sponsors, allowing us to invite many keynote speakers and fund the participation of more than 50 young researchers from developing countries. Let us warmly thank all those who made this possible.

Many people have to be thanked for working hard towards the preparation of the conference: the Organizing Committee and the Communication Committee did a wonderful job on all organizational matters: ranging from choosing the venue, to searching for sponsors, organizing social events, publicizing the conference and many more tasks which are necessary to make such an event a success. The contribution and sound advice from CCAFS and the CGIAR Consortium, Wageningen University and Research, the University of California Davis, FAO and GFAR made it possible to structure a world-class event. In addition to financial contributions from all the institutions quoted here, special thanks are due to the French Ministry of Agriculture, Agrifood and Forestry and to the French Ministry of Foreign Affairs and International Development who generously supported the conference, as well as to the *Région Languedoc-Roussillon,* the *Montpellier Méditerranée Métropole*, Agropolis Fondation (Labex Agro) and Labex Cemeb.

The CSA 2015 International Scientific Committee deserves warm thanks for designing the scientific program, identifying session topics and keynote speakers as well as selecting oral and poster contributions and their allocation to the different parallel sessions. Several staff from our institutions worked hard and cannot be thanked one by one. We are very grateful to all.

We very much hope that you will enjoy your stay in Montpellier and benefit from exciting scientific interactions.

Dr Jean-François Soussana, INRA, Chair, CSA Scientific Committee
Dr Patrick Caron, CIRAD, Chair, CSA Organizing Committee

Committees

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Claire Weill, INRA, France

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PARIS2015
UN CLIMATE CHANGE CONFERENCE
COP21·CMP11

Organizers

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INRA SCIENCE & IMPACT
IRD Institut de recherche pour le développement
AGROPOLIS INTERNATIONAL
WAGENINGEN UR For quality of life
CGIAR
RESEARCH PROGRAM ON Climate Change, Agriculture and Food Security
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Food and Agriculture Organization of the United Nations
agreenium Science for food security and sustainable agriculture
GFAR

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la Région Languedoc Roussillon
Montpellier Méditerranée Métropole
agropolis fondation
CeMEB

Montpellier and its surroundings

Montpellier has become over the past decades, a major hub for research on agriculture, environment and sustainable development issues. Montpellier is also one of the oldest University cities in France (XIIIth Century). It is located on a hilly ground, 10 kilometers inland from the Mediterranean Sea coast. The medieval center, the so-called *Ecusson*, gives the city its unique and intimate feeling.

Public transport (*TAM*)

Tickets can be bought from the automatic machines at each tramway station. The tramway Line 1, decorated in blue with white swallows, connects the northern part of the city with the *Odysseum* terminal on the southeast side. Line 2, decorated in a flower-power theme, goes from east to west. The colorful Line 3, designed by the famous fashion designer Christian Lacroix, goes from west to east, arriving near the seaside at Perols. From there, you can rent a bike or take a short walk (around 20 minutes) to get to the beach. The golden Line 4, also designed by Christian Lacroix, is only for downtown. About 30 bus lines are connected to the tramway lines to offer a comprehensive network that will transport you in and around Montpellier. *Le Corum* conference centre is at walking distance from *Le Corum* and *Comédie* tramway Stations.

TAM Ticket fares:
One-way ticket: € 1.50
1-day pass: € 4.00
7-days pass: € 6.00
10-ride pass: € 10.00

Vélomagg' bicycle service

The *Vélomagg'* service offers bicycles just the way you want them: available and inexpensive. For your riding pleasure, 50 automatic bike stations with over 2,000 bicycles are available in Montpellier and in the *Métropole* area. Service is open 24/7. All you need is personal identification and you can rent a bicycle to ride the streets of the city and outlying area. You can buy tickets at the *Esplanade* bike station (next to Montpellier Tourist Office).

Restaurants

A large variety of restaurants, cafés and bars can be found all over Montpellier, with a very large selection available at walking distance from *Le Corum* conference centre. Some of them are open late at night. Prices for a menu usually start at €12 for lunch and €20 for dinner.

Places of interest in Montpellier

1. **Crowne Plaza Montpellier Corum ******
2. **Mercure Montpellier Centre ******
3. **Ibis Montpellier Centre *****
4. **Ibis Montpellier Centre Comédie *****
5. **Citadines Antigone Montpellier ****
6. **Best Western Hotel Eurociel *****
7. **Océania Le Métropole ******

Food and drink areas

Getting around

Montpellier is the ideal place to stay and take advantage of both the seashore of Southern France and the many hidden treasures in the hinterlands of the *Région Languedoc-Roussillon*. Discover major UNESCO World heritage sites, scenic villages and landscapes, vineyards and vast natural areas such as the Camargue marshland and the Cévennes mountains.

Natural sites

Camargue marshes, with pink flamingos, ranches with black bulls and white horses,
Cévennes mountains, great for biking, mountain biking or bushwalking,

Pyrénées mountains, between Spain, Andorra and Ariège,
Mediterranean coastline, with many swamps near Montpellier, rocks and cliffs when getting near the Spanish boarder, in the scenic **Côte Vermeille**.

Historic cities

Nîmes, living Roman history (45 kms from Montpellier),
Sète, the fascinating birthplace of famous musician Georges Brassens and poet Paul Valéry, located between the Mediterranean Sea and the **Thau lagoon**, famous for its oyster farms (30 kms),
Pézenas, Molière's hometown (60 kms),
Aigues-Mortes, the medieval city of Saint Louis (30 kms),
Collioure, capital of Fauvism painting (190kms).

UNESCO World heritage sites

The colossal walled city of **Carcassonne**, a magnificent medieval city with its ramparts, the Basilique de St Nazaire and Château Comtal,
The **Pont du Gard,** an impressive Roman aqueduct,
The **Canal du Midi**, a beautiful canal with a succession of straitslocks and tunnels,
The medieval **Abbaye de Gellone**, located in the beautiful village of Saint-Guilhem-le-Désert on the route to Saint Jacques de Compostelle,
The **Causses** (elevated calcareous plateaux) and the unique Cirque de Navacelles.

Social program

The **Welcome cocktail** will be held at *Le Corum* on **Monday, 16 March, 19:00-21:00.**

The **Gala dinner** will be held at the *Chateau de Pouget* on **Tuesday, 17 March, 18:30-24:00.** Buses will leave at 18:30 from *Le Corum*, Level 0. The *Chateau de Pouget* is a magnificent castle, dating back to the 12th century, renovated in the 18th century and surrounded by vineyards. It is is located mid-way between Montpellier and Nîmes.

Post-conference visits

Visit 1: ***Climate change adaptation in viticulture and enology at the INRA experimental wine farm of Pech Rouge:***
Innovation technologies for Climate Change adaptation in Viticulture and Enology,
New management and enological practices for the improvement of wine quality and adaptation to Climate Change.– **Departure from Tramway station *Occitanie* at 08:30**

Visit 2: ***Agroforestry and climate change in a Mediterranean setting at the INRA Restinclières experimental farm:***
The Restinclières plots are the most mature agroforestry plots under uninterrupted study in Europe. They allow understanding the behaviour of Agroforestry systems on the long term, including the impact of Climate Change – **Departure from Tramway station *Occitanie* at 08:45.**

Visit 3: ***Montpellier's research infrastrcutures tour:***
Quarantine facilities for studies on tropical plant pathogens and related hosts (UMR DIADE & IPME)
Regional genotyping technology platform (UMR AGAP)
European Ecotron (CNRS)
Quarantine Ecotrop Platform (UMR ECO & SOLS)
Montpellier Plant Phenotyping Platforms (UMR LEPSE) – **Departure from Tramway station *Occitanie* at 09:00.**

Insurance

French health care does not cover visitors to France. Please ensure that you have a suitable insurance coverage in the event of illness or accident. The Organizing Committee will not accept liability for personal injuries sustained by, or for loss or damage to property belonging to the participants.

Practical information about *Le Corum*

Venue

Le Corum conference centre, Esplanade Charles De Gaulle, BP 2220, 34000 Montpellier – Tel: +33 0(4) 67 61 67 61
It is located in the city centre of Montpellier, a few minute's walk from *Corum* and *Comédie* tramway stations.

Registration

Participants should check in at the Welcome desk, Level 0 – Tel: +33 (0)4 67 61 66 64.
Open on Sunday 15 March, from 16:00 to 18:30 – Monday 16 March: from 7:30 to 19:00 – Tuesday 17 March: from 8:00 to 18:30 – Wednesday 18 March: from 8:00 to 18:30.
Media delegates are expected to check in at the Welcome desk, Level 0.
Badges are required for admission to all conference sessions, to the exhibition hall and the lunch area.

Preview room

Located in **Room Sully 3bis,Level 1.**
Sunday 15 March: open from 16:00 to 18:30.
Monday 16 March to Wednesday 18 March: open from 8:00 to 19:00.
It will not be possible to upload presentations directly in the conference lecture room (Auditorium Pasteur) nor in any of the parallel sessions rooms.

Abstracts

Abstracts for oral and poster presentations are available on the website and on the memory stick.

Poster exhibitions

It is located in the **Exhibition hall, Level 0.** It will remain accessible throughout the conference
Poster presenters should register at the Welcome desk at their arrival, where they will be allocated a display panel. Please note: **Posters for Sessions L1, L2 and L3 will be exposed on Monday, Tuesday and Wednesday respectively.**

Internet access

Wifi will be accessible in the Pasteur Auditorium, in Parallel Sessions rooms and in the Exhibition Hall, Level 0. **Access code: csa15 – Password: csa15.**

A Cyber Café will be available during the whole conference next to the Welcome desk at Level 0.

Catering information

Participants will be served a lunch box everyday at Level 3, upon presentation of their badges. Coffee breaks will be served at Level 0.

Participants are kindly asked **not to take food or beveradges to the sessions rooms.**

Messages

A message board is located adjacent to the Welcome desk at Level 0. Messages may be left at the Welcome desk or pinned to the board. No responsibility will be taken to deliver messages personally, so please check this board at regular intervals.

Cloakroom

It is located next to the Welcome desk at Level 0.

Lost property

Please report any lost property to the Welcome desk, Level 0.

Smoking

Le Corum is a designated non-smoking venue.

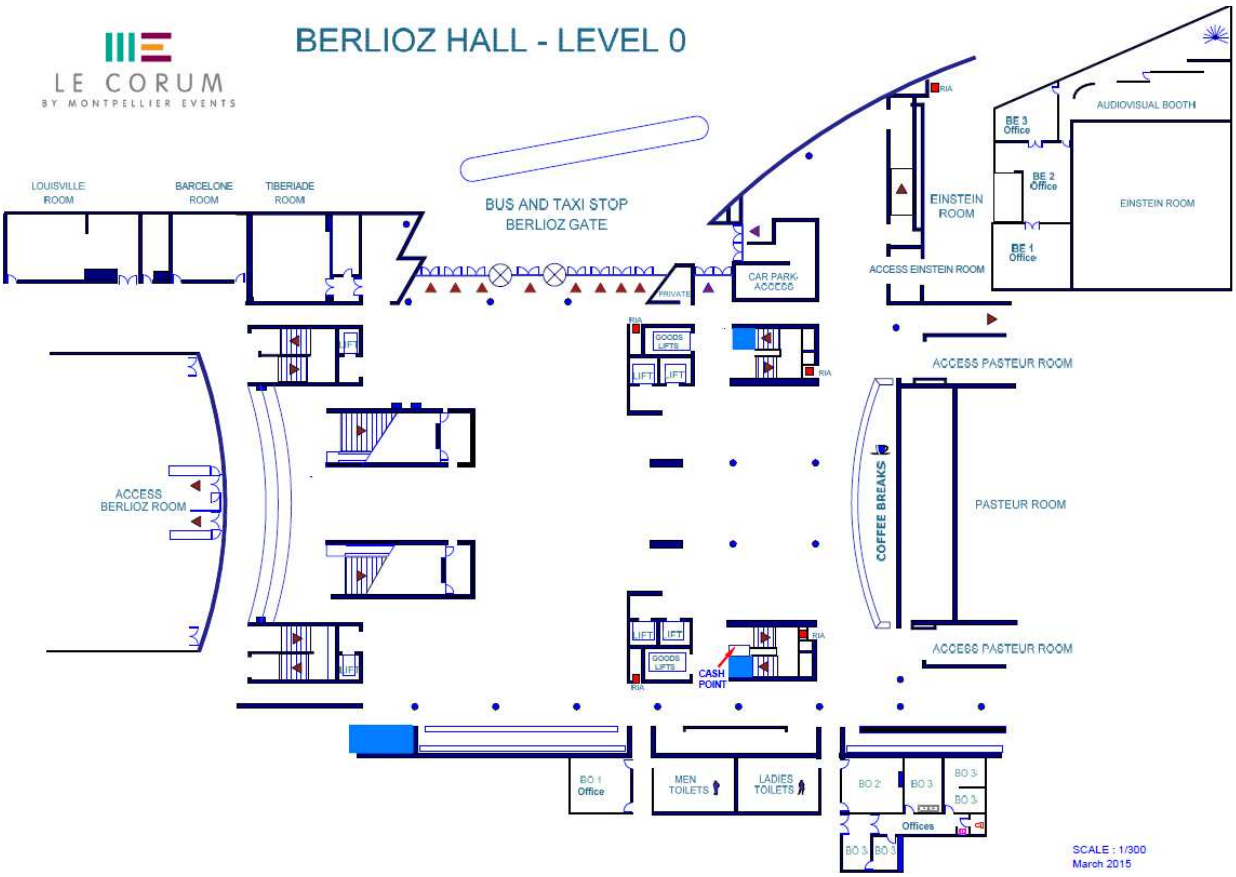
Taxis in Montpellier

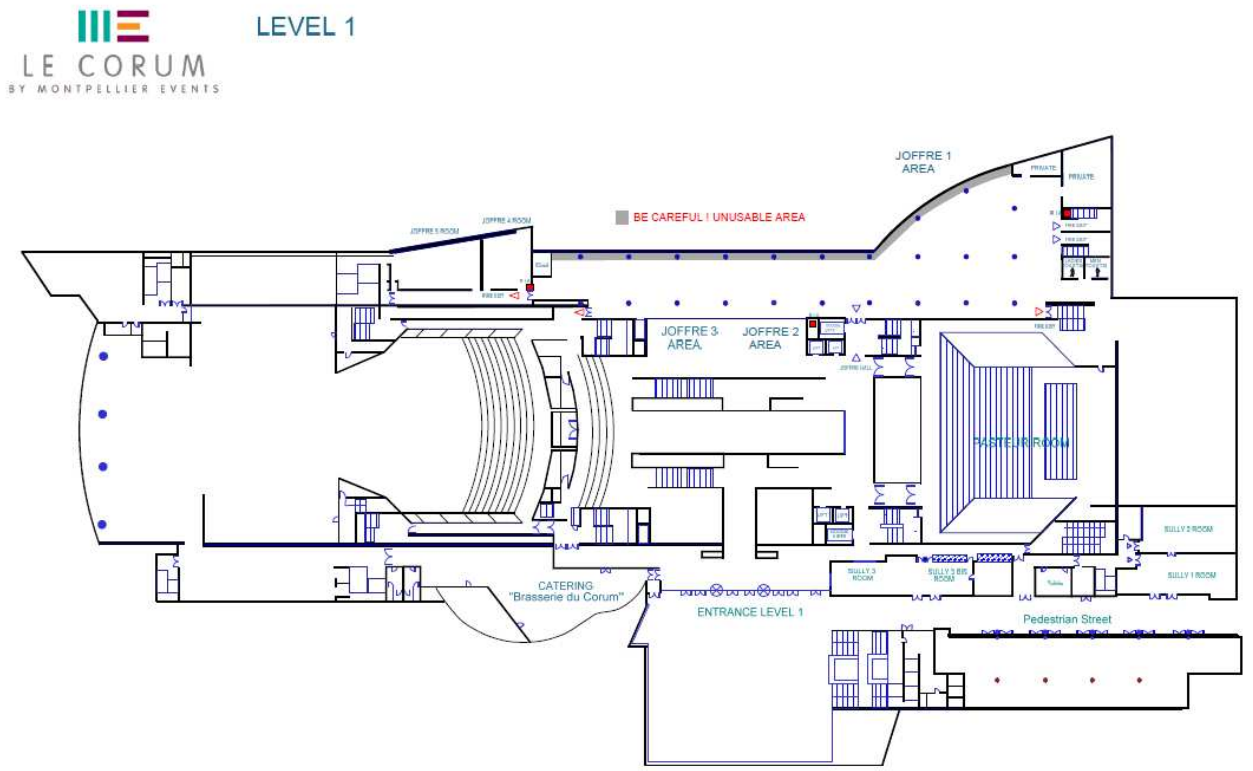
Taxi Tram – Tel: +33(0)4 67 58 10 10
Allo Taxi 34 – Tel: +33(0)4 67 81 42 74
Taxi Bleu – Tel: +33(0)4 67 03 20 00
Taxi Radio du Midi – Tel: +33(0)4 67 10 00 00

Doctor

Montpellier Emergency Hospital
Hôpital Lapeyronie, Avenue Charles Flahaut
Tel: 04 67 33 81 67 or 04 67 33 81 68
Alternatively, please contact *Le Corum* Reception desk for any assistance – Tel: +33(0)4 67 61 67 61

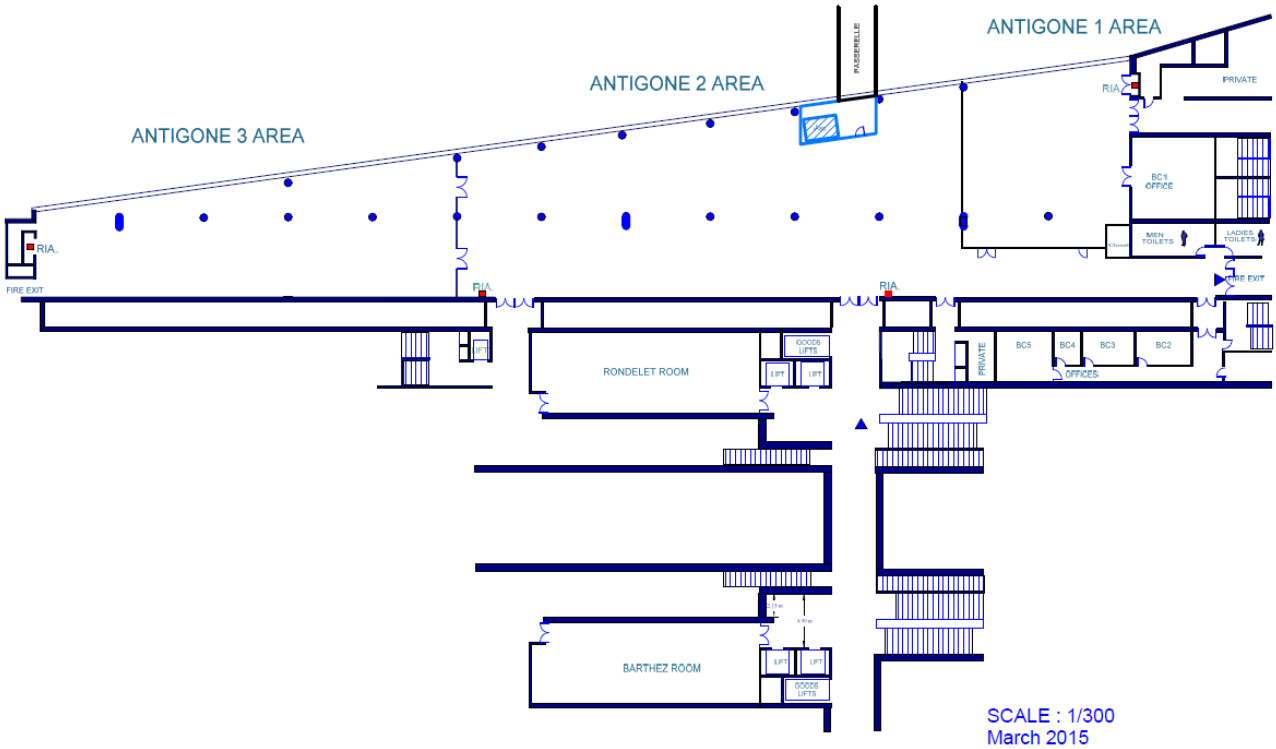
Maps of *Le Corum*





LE CORUM
BY MONTPELLIER EVENTS

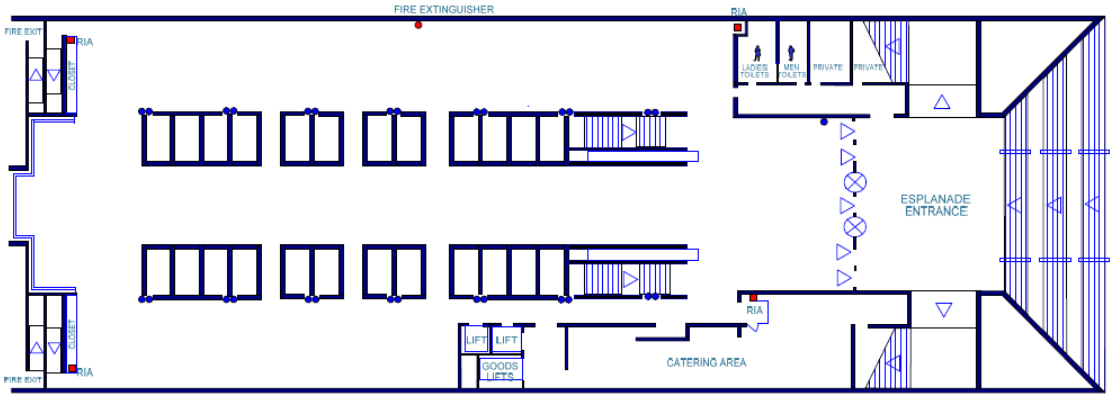
ANTIGONE HALL - LEVEL 2
Gross Surface = 1.440 sq m



SCALE : 1/300
March 2015
Height to the celling = 3.35 m

LE CORUM
BY MONTPELLIER EVENTS

LEVEL 3 - ESPLANADE LOUNGES



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March 2015
Height to the celling = 3.37 m

Program overview (may be subject to change)

Sun., 15 March	Monday, 16 March		Tuesday, 17 March		Wednesday, 18 March		Thursday, 19 March
	07:30	**REGISTRATION**	08:30	**Special Plenary Keynote** on CSA Science-Policy Interface: bringing findings of CSA science to policy-makers	08:30	**Parallel sessions L3:** Towards Climate-smart Solutions & **Poster session**	**Post-Conf. Visits** (departing at 8:30)
	09:00	**Plenary 1: Opening**	09:00	**Plenary 3:** Questions for Climate-Smart Agriculture		L3.1 Climate adaptation and mitigation services L3.2 Climate-smart cropping systems L3.3 Climate-smart livestock L3.4 Climate-smart landscapes, watersheds and territories L3.5 Investment opportunities and funding instruments	**Visit 1: Pech Rouge** Climate change adaptation in Viticulture and Enology at an experimental Wine Farm **Visit 2: Restinclières** Agroforestry and Climate change in a Mediterranean setting **Visit 3: Montpellier Research Infrastructures Tour** • Quarantine facilities for studies on tropical plant pathogens and related hosts • Regional genotyping technology platform • European Ecotron • Quarantine Ecotrop Platform • Montpellier Plant Phenotyping Platforms
	10:30	Coffee break		P3.1 Keynote on Resilience & adaptation P3.2 Keynote on Sustainable intensification & mitigation P3.3 Keynote on Agroecology, soils & ecosystem adaptation P3.4 Key Note on Food security & food systems			
	11:00	**Plenary 2:** Global dimensions					
		P2.1 Keynote on Climate change, risks, extremes and uncertainties P2.2 Keynote on Climate-Smart Agriculture: conceptual framework and brief history P2.3 Keynote on Impact and adaptation of agriculture to climate change and climatic variability P2.4 Keynote on Supply and demand based greenhouse gas mitigation	11:00	Coffee break	08:30	Keynote Speakers lectures	
16:00 REGISTRATION 18:30			11:30	**Special Plenary Keynote** on Land degradation, desertification	09:30	**Poster session** with Coffee break	
			12:00	**Plenary P4:** Feedback from L1 parallel sessions (towards regional science agendas)	11:00	L3 Sessions continue	
	13:00	Onsite lunch	13:00	Onsite lunch	12:30	Onsite lunch	
	14:00	**Parallel sessions L1:** Regional dimensions & **Poster session**	14:00	**Parallel sessions L2**. Climate-smart strategies & **Poster session**	13:30	**Plenary P5:** Feedback from L2 parallel sessions	
18:15 KEYNOTE LECTURE By Prof. Sir Gordon Conway		L1.1 Africa L1.2 Australasia L1.3 Latin America L1.4 Europe L1.5 North America		L2.1 Developing and evaluating climate-smart practices L2.2 Facing climatic variability and extremes L2.3 Combining mitigation, adaptation and sustainable intensification L2.4 Breeding and protecting crops and livestock L2.5 Overcoming barriers: policies and institutional arrangements to support CSA	14:30	**Plenary P6:** Feedback from L3 parallel sessions	
					15:30	Coffee break	
	14:00	Keynote Speakers lectures	14:00	Keynote Speakers lectures	16:00	**Plenary P7:** Round Table on What are the expectations from End-users and Policy makers towards the Scientific community?	
	15:00	**Poster session** with Coffee break	15:00	**Poster session** with Coffee break			
	16:30	L1 Sessions continue	16:30	L2 Sessions continue	17:30	**Plenary P8:** Towards a CSA science roadmap From Montpellier to the next CSA conference Formal closing session	**Public Conference on CSA** *Diagonal Capitole* (starting at 20:00)
	18:00	**Award Ceremony:** *Louis Malassis International Scientific Prize for Agriculture and Food & Olam Prize for Innovation in Food Security* – **Cocktail starting** at 19:00	18:30	**Conference Gala dinner at *Château de Pouget*** (departure from *Le Corum*)			

Detailed schedule

Sunday 15 March 2015	
16:00–18:00	**Registration**
18:15–19:45	**Keynote lecture** ***"We are all in the same boat: food production and food security under threat by climate change"*** **by** **Professor Sir Gordon Conway**, Director, Agriculture for Impact, Imperial College London **AUDITORIUM EINSTEIN**

Monday 16 March 2015	
07:30–09:00	**Registration**
09:00–10:30	**Plenary 1: Opening Ceremony – AUDITORIUM PASTEUR** **Anne-Marie Descôtes**, Director General for Global Affairs, Development and Partnerships, French Ministry of Foreign Affairs and International Development **Yves Pietrasanta**, Vice-President of Région Languedoc-Roussillon, on behalf of Damien Alary, President of Région Languedoc-Roussillon **Isabelle Touzard**, Vice-President of Montpellier Méditerranée Métropole, on behalf of Philippe Saurel, President of Montpellier Méditerranée Métropole and Mayor of Montpellier **Mihail Dumitru,** Deputy Director General, DG Agriculture and Rural Development, European Commission **François Houllier**, Executive Chair of INRA, also on behalf of Michel Eddi, Executive Chair of CIRAD, Jean-Paul Moatti, Executive Chair of IRD and Bernard Hubert, Chair of Agropolis International **Ren Wang,** Assistant Director-General of the Agriculture and Consumer Protection Department at the FAO **Juan Lucas Restrepo Ibiza,** Chair of the Global Forum on Agricultural Research (GFAR) and Executive Director of CORPOICA (Colombia) **Frank Rijsberman,** CEO, CGIAR Consortium, Montpellier, France **Prof. dr. M.J. Kropff,** Vice chairman of the Executive Board of Wageningen UR, Rector Magnificus Wageningen University **Linda Katehi,** Chancellor, University of California, Davis **Patrick Caron,** Director General for Research and Strategy, CIRAD **Jean-Luc Chotte**, Co-chair of the CSA2015 Organizing Committee, IRD
10:30–11:00	**Coffee Break – Level 0**
11:00–13:00	**Plenary 2: Global Dimensions – AUDITORIUM PASTEUR** **Chair: Jean-François Soussana** **Hervé le Treut** (IPSL): Climate-Change: from global alert to local studies **Ren Wang** (FAO): Climate-Smart agriculture: conceptual framework and brief history (tbc) **Mark Howden** (CSIRO): From climate adaptation assessment to action and back again: a food system perspective **Pete Smith** (University of Aberdeen): Supply and demand based greenhouse gas mitigation
13:00–14:00	**Onsite Lunch Break – Level 3**

14:00–18:00	**Parallel sessions L1: Regional Dimensions & Poster Session**
	Parallel session L.1.1: Africa – ROOM SULLY 1 **Chair: James Kinyangi**
14:00–15:00	*Keynotes* **Maggie Opondo** (University of Nairobi): Engendering climate resilient agricultural livelihoods in Africa **Bruno Locatelli** (CIRAD-CIFOR): Integrating Ecosystem-based Adaptation and Mitigation in Africa: Policy and Practice
15:00–16:30 16:30–18:00	*Poster Session & Coffee Break* *Oral presentations* **Tantely Razafimbelo** (Antananarivo University): Climate smart practices impact soil organic carbon storage in Madagascar **Katrien Descheemaeker** (Wageningen University and Research): A modelling framework to assess climate change and adaptation impact on heterogeneous crop-livestock farming communities **Henderson Ben** (CSIRO): Closing yield gaps to increase food supply and mitigate GHG emissions for African smallholders **KindieTesfaye** (CIMMYT): Potential for taking climate smart agricultural practices to scale: Examples from Sub-Saharan Africa
	Parallel session L.1.2: Australasia – ROOM SULLY 2 **Chair: Frédéric Gay**
14:00–15:00	*Keynotes* **Pramod Aggarwal** (CGIAR, CCAFS): Climate-smart agriculture in South Asia: Opportunities and constraints in scaling out **Imelda Bacudo** (GAP-CC): Promotion of Climate Resiliency for Food Security in the Association of Southeast Asian Nations: Regional Policy Making and Funding Opportunities
15:00–16:30 16:30–18:00	*Poster Session & Coffee Break* *Oral presentations* **Tu Trinh Quang** (RIA): Integrated rice-shrimp as a smart strategy to cope with climate change in the Mekong Delta, Vietnam **Guillaume Lacombe** (IWMI): Changing rainfall pattern in Northeast Thailand and implications for cropping systems adaptation **Norman Uphoff** (Cornell University): A review of contributions that the System of Rice Intensification (SRI) can make to climate-smart agriculture **Sikka Ak** (Indian Council of Agricultural Research): Development of climate resilient villages
	Parallel session L.1.3: Latin America – ROOM SULLY 3 **Chair: Mirjam Pulleman**
14:00–15:00	*Keynotes* **Pauline Aldunce** (*Universidad de Chile*): Are we adapting to climate change? The case of the Chilean agricultural sector **Maureen Arguedas-Marín** (CATIE): Economic valuation of mangrove´s ecosystem services in Gulf of Nicoya, Costa Rica
15:00–16:30 16:30–18:00	*Poster Session & Coffee Break* *Oral presentations* **Michel Schlaifer** (ECLAC): The experience in policy dialogue for agriculture and climate change in LAC countries: an overview **Cecilia Turin** (International Potato Center): Implications of losing the complementariness of gender roles on CSA strategies in the Peruvian Altiplano

	Milagro Saborio-Rodriguez (CATIE): How do coffee farmers adapt to perceived changes in climate? Evidence from Central America **Claudia Bouroncle** (CATIE): Practices and enabling conditions for climate-smart agriculture: current status in seven countries in Latin America
14:00–15:00 15:00–16:30 16:30–18:00	**Parallel session L.1.4: Europe – ROOM RONDELET** **Chair: Jean-François Soussana** *Keynotes* **Patrik Kolar** (European Commission): FACCE-JPI: an European partnering initiative to tackle food security and climate change–one of the greatest societal challenges **Niels Gøtke** (Nordic Joint Committee for Agricultural and Food Research & FACCE JPI) *Poster Session & Coffee Break* *Oral presentations* **Stefan Fronzek** (Finnish Environment Institute): Wheat yield sensitivity to climate change across a European transect for a large ensemble of crop models **Vera Eory** (SRUC): Economic assessment of greenhouse gas mitigation on livestock farms **Natalie Trapp** (Universität Hamburg): Agricultural Adaptation to Climate Change in the European Union **R.M. Rees** (Scotland's Rural College): Legume supported cropping systems for Europe (Legume Futures)
14:00–15:00 15:00–16:30 16:30–18:00	**Parallel session L.1.5: North America – ROOM BARTHEZ** **Chair: Cynthia Rosenzweig** *Keynotes* **Charles Walthall** (USDA ARS): Building Climate Smart, Sustainable, Intensive Agriculture For the 21st Century and Beyond **Louise Jackson** (UC Davis): Scientific Article Summarizing the 2013 CSA Global Science Conference in North America *Poster Session & Coffee/Tea Break* *Oral presentations* **Raj Khosla** (Colorado State University): The 4-R nutrient stewardship and its role in climate smart agriculture **Brenda V. Ortiz** (Aubrun University): From climate variability to climate change: building adaptive capacity among row crop farmers in the Southeastern USA **Samuel Sandoval Solis** (University of California, Davis): Climate Smart Agriculture and Water Management in California **Bruno Basso** (Michigan State University East Lansing): Dealing with climate and yield variability: the role of precision agricultural technologies and crop models
18:00–19:00	**Award Ceremony:** ***Louis Malassis International Scientific Prize for Agriculture and Food & Olam Prize for Innovation in Food Security*** **– AUDITORIUM PASTEUR** LOUIS MALASSIS INTERNATIONAL SCIENTIFIC PRIZE OLAM 25 YEARS
19:00–20:30	**Cocktail – Hall, Level 0**

Tuesday 17 March	
8:30–9:00	**Special session: Talk by Mr. Stéphane Le Foll, French Ministry of Agriculture, Agrifood and Forestry**
9:00–9:30	**Special Plenary Keynote on CSA Science-Policy interface: Bringing findings of CSA science to policy-makers – AUDITORIUM PASTEUR** **Chair: Jean-Luc Chotte** **Amadou Allahoury** (Niger President Office, HLPE): Bringing findings of "CSA science" to policy makers
9:30–12:00 9:30–10:30	**Plenary 3: Key Questions for Climate-Smart Agriculture – AUDITORIUM PASTEUR** **Chair: Jean-Luc Chotte** **Holger Meinke** (University of Tasmania): Adaptation, Resilience and Climate Smart Agriculture – from concepts to action **Mercedes Bustamante** (University of Brasilia): Sustainable intensification and mitigation
10:30–11:10	**Coffee Break – Level 3**
11:00–12:00	**Pablo Tittonell** (Wageningen University and Research): Agroecology *is* climate smart **Sonja Vermeulen** (CCAFS) **and John Porter** (NRI): Climate-smart food systems
12:00–12:30	**Special Plenary Keynote on Land degradation, Desertification – AUDITORIUM PASTEUR** **Chair: Jean-Luc Chotte** **Bill Payne** (University of Nevada): The Tragedy of the Commons Revisited: Land Degradation and Desertification on Public Lands
12:30–14:00	**Onsite Lunch Break – Level 3**
14:00–18:00	**Parallel sessions L2: Climate-smart Strategies & Poster Session**
14:00–15:00 15:00–16:30 16:30–18:00	**Parallel session L2.1: Developing and evaluating climate-smart practices – ROOM SULLY 1** **Chair: Munyaradzi Chitakira** *Keynotes* **Bruce Campbell** (CCAFS): Developing and evaluating climate-smart practices and services **Martial Bernoux** (IRD): Evaluating agricultural mitigation and scaling up climate-smart practices using the FAO EX-Ante Carbon-balance Tool *Poster Session and Coffee Break* *Oral presentations* **Byomkesh Talukder** (Wilfrid Laurier University): Rain water-based integrated agricultural system: A model for ensuring food security and adaptation in coastal Bangladesh **Hidalgo D. Medina** (Commonwealth Scientific and Industrial Research Organization): Additive impacts of climate-smart agriculture practices in mixed crop-livestock systems in Burkina Faso **Ijeoma Emenanjo** (The World Bank Group): Developing Indicators for Climate-Smart Agriculture (CSA) **Jan Verhagen** (Wageningen UR): Towards metrics to track and assess climate smart agriculture

	Parallel session L2.2: Facing climatic variability and extremes – ROOM SULLY 2 **Chair: Arona Diedhiou**
14:00–15:00	*Keynotes* **Robert Zougmoré** (CCAFS, ICRISAT): Facing climatic variability and extremes **Thierry Lebel** (IRD): Rainfall modifications in the context of climate change: the puzzle of the tropical regions
15:00–16:30	*Poster Session & Coffee Break*
16:30–18:00	*Oral presentations* **Festo Massawe** (University of Nottingham Malaysia Campus): The potential for underutilised crops to improve food security in the face of climate change **David Leclère** (IIASA): Changes in climate variability and potential for impacts of droughts on agricultural markets **Jean-Louis Durand** (INRA): How precisely do maize crop models simulate the impact of climate change variables on yields and water use? **Anne Mottet** (FAO): Modeling livestock production under climate constraint in the African drylands to identify interventions for adaptation
	Parallel session L2.3: Combining mitigation, adaptation and sustainable intensification – ROOM SULLY 3 **Chair: Louise Jackson**
14:00–15:00	*Keynotes* **Kenneth Cassman** (University of Nebraska–Lincoln): *Ex-Ante* Evaluation of Climate-Smart Agriculture Options **Lini Wollenberg** (University of Vermont, CCAFS): Will sustainable intensification get us to 2 degrees Celsius?
15:00–16:30	*Poster Session & Coffee/Tea Break*
16:30–18:00	*Oral presentations* **Monika Zurek** (Climate Focus): Climate readiness in smallholder agricultural systems: Lessons learned from REDD+ **Ulrich Kleinwechter** (IIASA): Assessing low emissions agricultural pathways under alternative climate policy regimes **Laurence Jassogne** (IITA): Climate-smart coffee systems in East Africa **Paresh Shirsath** (IWMI-New Delhi): Prioritizing Climate-Smart Agricultural Interventions at Multiple Spatial and Temporal Scales
	Parallel session L2.4: Breeding and protecting crops and livestock – ROOM RONDELET **Chair: Kenneth Cassman**
14:00–15:00	*Keynotes* **Jean-Christophe Glaszmann** (CIRAD): Plant breeding for climate-smart agriculture **Renaud Lancelot** (CIRAD): What impact of climate change on animal health?
15:00–16:30	*Poster Session & Coffee/Tea Break*
16:30–18:00	*Oral presentations* **Jos van Boxtel** (Arcadia Biosciences): Reducing nitrogen run-off and emission, and increasing rice productivity in African rice production environment **Sunil Archak** (ICAR-National Bureau of Plant Genetic Resources): Utilization of ex situ collections and climate analogues for enhancing adaptive capacity to climate change **Denis Laloë** (Inra/AgroParisTech): Adaptation of Mediterranean bovine livestock to climate constraints. Genetic diversity and breeding systems **François Tardieu** (INRA, LEPSE): Towards genotypes adapted to climate change via combination of phenotyping and modelling: The projects DROPS and Phenome

14:00–15:00 15:00–16:30 16:30–18:00	**Parallel session L2.5: Overcoming barriers: policies and institutional arrangements to support CSA – ROOM BARTHEZ** **Chair: Allison M. Chatrchyan** *Keynotes* **Leslie Lipper** (FAO): Policies and institutional arrangements to support CSA **Laurent Sédogo** (WASCAL): Policies and institutions conducive for enhancing the transfer to CSA in Africa *Poster Session & Coffee Break* *Oral presentations* **Myriam Layaoen (**Philippin Rice Research Institute): Schools as climate smart agriculture information hubs **Harry Clark** (NZAGRC): Advancing CSA solutions through global collaboration: the Global Research Alliance on Agricultural Greenhouse Gases **Adriana Paolantonio** (FAO): Using whole-farm models for policy analysis of climate smart agriculture **Songporne Tongruksawattana** (CIMMYT): Climate shocks and risk attitudes among female and male maize farmers in Kenya
18:30-Till late	**Gala dinner at the *Château de Pouget***

Wednesday 18 March 2015	
8:30–12:30	**Parallel sessions L3: Towards Climate-smart Solutions & Poster session**
08:30–09:30 09:30–11:00 11:00–12:30	**Parallel session L3.1: Climate adaptation and mitigation services – ROOM SULLY 1** **Chair: Eddy Moors** *Keynotes* **Cynthia Rosenzweig** (NASA's Goddard Institute for Space Studies, AgMIP): AgMIP Contributions to Climate-Smart Agriculture **Eddy Moors** (Wageningen University and Research): Adaptation and mitigation services for climate smart agriculture *Poster Session & Coffee Break* *Oral presentations* **Leila Akhmiss and Abdellatif Rami** (IAV Hassan II, CHA / AGROTECH): Public-Private Partnership For Climate-Smart Irrigation Initiative in Morocco: The experience of Souss Massa Region **Vinay Sehgal** (Indian Agricultural Research Institue, New Delhi): DSS for monitoring agro-meteorological and crop conditions in India using remote sensing for agro-advisory services **Jacob van Etten** (Bioversity International): Can citizen science accelerate climate adaptation by poor farming households? **Fiona Ehrhardt** (INRA): An international intercomparison & benchmarking of crop and pasture models simulating GHG emissions and C sequestration
08:30–09:30 09:30–11:00 1:00–12:30	**Parallel session L3.2: Climate-smart cropping systems – ROOM SULLY 2** **Chair: Pramod Aggarwal** *Keynotes* **Michael Obersteiner** (IIASA): Climate-Smart Agriculture – adaptation or transformation **Philippe Debaeke** (INRA): Designing and assessing climate-smart cropping systems in temperate and tropical agriculture *Poster Session & Coffee Break* *Oral presentations* **Jean-Jacques Drevon** (INRA): Phosphorus use efficiency in symbiotic N2 fixation for coupling bio-geochemical cycles in agrosystems with legumes

	Eric Penot (CIRAD): Conservation agriculture and agro-ecology practices to mitigate climatic variations in medium altitude in Madagascar **Hoyoung Kwon** (International Food Policy Research Institute): Agronomic and environmental benefits of climate-smart farming practices modeled for rice-based system in India **Philippe Vaast** (CIRAD, ICRAF): Smallholders' coffee and cocoa agroforestry systems, examples of climate-smart agriculture
	Parallel session L3.3: Climate-smart livestock – ROOM SULLY 3 **Chair: Mark Howden**
08:30–09:30	*Keynotes* **Mario Herrero** (CSIRO): Climate-smart livestock systems: lessons and future research **Jean-François Soussana** (INRA): Livestock and climate change: combining mitigation and adaptation options and projecting sustainable futures
09:30–11:00	*Poster Session & Coffee Break*
11:00–12:30	*Oral presentations* **Petr Havlik** (IIASA): Differential climate change impacts on crop and grasslands and the relative livestock production systems competitiveness **Pierre Gerber** (FAO): Efficiency gains for enteric methane mitigation and productivity: contribution to CSA and investment opportunities **Anne Collin** (INRA): Variations in egg incubation temperature enable chicken acclimation through long-lasting changes in energy metabolism **Juan Pablo Inamagua-Uyaguar** (CATIE): Impact of feeding strategies on GHG emissions, income over feed cost and economic efficiency on milk production
	Parallel session L3.4: Climate-smart landscapes, watersheds and territories – ROOM RONDELET **Chair: Bruno Rapidel**
08:30–09:30	*Keynotes* **John Beer** (CATIE): Climate Smart Territories; what are they and how do we evaluate progress towards this goal? **Úrsula Oswald Spring** (National Autonomous University of Mexico, UNU-EHS): Towards climate-smart landscapes and watersheds
09:30–11:00	*Poster Session & Coffee Break*
11:00–12:30	*Oral presentations* **Jean-Marc Blazy** (INRA): Prototyping climate-smart agricultural landscapes: a generic modelling framework and application in a tropical island **Bruno Locatelli** (CIRAD-CIFOR): Managing trade-offs in climate-smart landscapes: A global analysis at multiple levels **Peter A Minang** (ICRAF): Climate-Smart Landscapes: Multifunctionality in Practice **Joice Ferreira** (Embrapa Amazonia Oriental): A platform for landscape ecoeficiency monitoring and jurisdictional certification in the amazon region
	Parallel session L3.5: Investment opportunities and funding instruments – ROOM BARTHEZ **Chair: Leslie Lipper**
08:30–09:30	*Keynotes* **Merylyn Hedger** (ODI): Delivering Climate Smart Agriculture: prospects from climate finance **Tim Searchinger** (Princeton University, WRI): "What Can Fund Climate Smart Agriculture?"
09:30–11:00	*Poster Session & Coffee Break*
11:00–12:30	*Oral presentations* **Ada Ignaciuk** (OECD): How to deal with trade-offs? - A manual for policymakers **Ana Iglesias** (*Universidad Politécnica de Madrid*): Exploring strategic management of agricultural systems to link mitigation and adaptation to climate change

	Armine Avagyan (FAO): Nationally appropriate mitigation actions (NAMAs) for upscaling climate-smart agriculture practices **Helen Greatrex** (IRI): A business approach to poverty reduction: weather index based insurance and climate smart agriculture
12:30–13:30	Onsite Lunch Break – Level 3
13:30–14:10	**Plenary P4 Feedback from L1 parallel sessions – AUDITORIUM PASTEUR** **Peter Minang and Jean-Luc Chotte**
14:10–14:50	**Plenary P5: Feedback from L2 parallel sessions – AUDITORIUM PASTEUR** **Louise Jackson and Emmanuel Torquebiau**
14:50–15:30	**Plenary P6: Feedback from L3 parallel sessions – AUDITORIUM PASTEUR** **Leslie Lipper and Jean-François Soussana**
15:30–16:00	Coffee Break – Level 3
16:00–17:30	**Plenary P7 Round Table: What are the expectations from End-users and Policy-makers? – AUDITORIUM PASTEUR** **Chair: Alain Vidal** **Juan Lucas Restrepo Ibiza** (Chair, GFAR and Executive Director, CORPOICA) **Patrice Burger**, Executive Director of CARI (On behalf of the French Consortium Coordination Sud Commissions "Climate and Development" and "Food and Agriculture") **Thierry Blandinières**, CEO, INVIVO, First French Agricultural Cooperation Group **Lindiwe Majele Sibanda**, Food, Agriculture and Natural Resources Policy Analysis Network (FANRPAN) (tbc) **Leslie Lipper**, Senior Environmental Economist, Agriculture and Development Economics Division, FAO **Victor Villalobos**, Director General, IICA (*Instituto Interamericano de Cooperación para la Agricultura*) (tbc)
17:30–18:30	**Plenary P8: Towards a CSA science roadmap From Montpellier to the next CSA conference Formal Closing session – AUDITORIUM PASTEUR** **Jean-Luc Chotte**, IRD, Director of ECO&SOLS Research Unit Officer **Jean-François Soussana**, INRA, Scientific Director for Environment **Patrick Caron**, CIRAD, Director General for Research and Strategy **Laurence Tubiana**, Ambassador and Special Representative of the French Government for COP21 **Martin Bwalya,** Head of Agriculture and Food Security Directorate, NEPAD & Co-Chair of the Global Alliance on Climate-smart Agriculture (tbc)

Thursday 19 March 2015	
Day-long (lunch included)	**Post-Conference Field Trips and Research Infrastructures Tour** **Visit 1:** Climate change adaptation in Viticulture and Enology at an experimental Wine Farm **Visit 2:** Agroforestry and climate change in a Mediterranean setting **Visit 3:** Montpellier's Research Infrastructures Tour
20:00–22:00	**Public Conference on CSA (in French)** **In town at DIAGONAL CAPITOL movie theatre** 5 Rue de Verdun, 34000 Montpellier (Tramway station: *Comédie*) ***« Changement climatique et agriculture : quelles solutions pour l'avenir ? »*** **Speakers:** **Jean-Marc Touzard,** *Directeur de recherche à l'Inra, Montpellier* **Jean-François Soussana,** *Directeur scientifique Environnement à l'Inra, Paris et membre du GIEC* **Yacine Badiane NDour,** *Directrice du Laboratoire national de recherches sur les productions végétales, Isra-Institut sénégalais de recherche agricole, Dakar, Sénégal*

Side events

Side-events in Montpellier

Annual workshop of the Animal Health & Greenhouse Gas Emissions Intensity Network

Date: **Sunday, 15 March 2015 – Full day event**
Expected attendance: 20
Venue: ***Crowne Plaza Montpellier Corum* Hotel**
Contact person: Alice Willett at
animalhealthnetwork@adas.co.uk
Website: www.globalresearchalliance.org/

The Animal health and Greenhouse Gas (GHG) Emissions Intensity Network of the Global Research Alliance on Agricultural Greenhouse Gases aims to bring together researchers from around the world to investigate links and synergies between efforts to reduce animal disease and possible GHG mitigation through disease control.
The second annual Network workshop will be held on Sunday 15th March 2015 (full day event) in the margins of Climate-Smart Agriculture 2015 Global Science Conference at Le Corum, Montpellier, France. The workshop will bring together relevant researchers (e.g. animal scientists, veterinary scientists, epidemiologists, economists, GHG researchers) and research funders to develop international links, share information on current research and discuss opportunities to build upon this research, and identify data requirements and expertise needed to progress work on animal health and GHG's.
For further information on the Network, please see the report of the first workshop at
http://www.globalresearchalliance.org/community/alliance-member-countries/member-country-page-united-kingdom/uk-activities-livestock-research-group/

CSA Alliance Knowledge action group (Upon invitation

Date: **Sunday, 15 March 2015**
Expected attendance: 100
Venue: **Agropolis International**
Contact person: Federica.Matteoli@fao.org
For registration:
https://www.surveymonkey.com/r/KZW92X7
Website: http://www.climatesmartagriculture.org/

The Knowledge Action Group (KAG) of the ACSA co-led by the FAO and CGIAR/CCAFS is organizing this workshop in order to secure inputs and organize the work on research priorities for CSA and partnerships to make these priorities possible. The activities identified at the workshop will form inputs into the development of the KAG's action plan.

Global Research Alliance on Greenhouse Gases (GRA) (Upon invitation)

Date: **Sunday, 15 March 2015**
Expected attendance: 30
Venue: ***Le Corum* (Room Louisville)**
Contact person : jan.verhagen@wur.nl
Website: **www.globalresearchalliance.org/**

The Global Research Alliance on Agricultural Greenhouse Gases brings countries together to find ways to grow more food without growing greenhouse gas emissions.

FACCE JPI Governing Board (Upon invitation)

Date: **Tuesday, 17 March 2015**
Expected attendance: 35
Venue: ***Le Corum* (Room Louisville)**
Contact person: Heather.Mckhann@paris.inra.fr
Website: www.faccejpi.com/About-Us

FACCE JPI is the Joint Research Programming Initiative on Agriculture, Food Security and Climate Change

CSA and Agroecology working group (Upon invitation)

Date: **Tuesday 17th March 2015, lunch time**
Expected attendance: 20
Venue: ***Le Corum* (Room Sully 3)**
Contact person: Florent.maraux@cirad.fr and emmanuel.torquebiau@cirad.fr

Meeting of the Technical Advisory Committee of the Project "Knowledge and technical services in the development of "Climate Smart Agriculture" and "Agroecology" approaches", co-organized by CIRAD and FAO.

Global Alliance on CSA (GACSA): presentation (Open to all)

Date: **Tuesday, 17 March 2015 – lunch time**
Expected attendance: To be confirmed
Venue: ***Le Corum* (Room Barthez)**
Contact person: Leslie.lipper@fao.org and patrick.caron@cirad.fr
Website: http://www.fao.org/climate-smart-agriculture/85725/en/

GACSA seeks to improve people's food security and nutrition in the face of climate change.
Details of the meeting to be confirmed..

The Regional Multidisciplinary Platform "Rural Communities, Environment and Climate in West Africa" – PPR SREC (Open to all)

Date: **Wednesday, 18 March 2015 – lunch time**
Expected attendance: 50/60
Venue: ***Le Corum* (Room Barthez)**
Contact person : **jean-luc.chotte@ird.fr**
Website: **http://www.ppr-srec.ird.fr/**

Presentation of PPR SREC, a cross-disciplinary, regionally integrated multi-stakeholders platform for innovative approaches, education and training in West Africa, in the face of climate change and food security.

AGRINATURA: Annual Meetings and General Assembly 2015 focusing on "Building capacities to address climate change"

Upon invitation

Date: **Thursday, 19 March and Friday, 20 March 2015**
Expected attendance: 50
Venue: **IRC/Montpellier SupAgro and Agropolis International**
Contact person: **pillot@supagro.inra.fr**
Website: **http://www.agrinatura.eu/**
See also: **http://www.agropolis.org/news/2015-agrinatura-climate-change-side-event-montpellier.php**

General Assembly and workshop of AGRINATURA, The European Alliance on Agricultural Knowledge for Development.

Final meeting of the AnimalChange European project

The large collaborative project **AnimalChange** funded from the European Union's Seventh Framework Programme for research, technological development and demonstration, will hold its final meeting at Agropolis International to present relevant project results.

Date: **Thursday 19 March, 14:00–18:00 (open to all upon registration & Friday, 20 March 2015, 9:00–14:00 (restricted to members of the AnimalChange consortium)**

Expected attendance: 80-100
Venue: **Agropolis International**
Contact person: **irina.carpusca@paris.inra.fr**
Website: **http://www.animalchange.eu/**

Side-event in Paris

Gender Seminar and Panel (Open to all)

"Closing the gender gap in farming under climate change: New knowledge for renewed action"

Date: **Thursday, 19th March 2015, 9.00am – 2.30pm**
Expected attendance: 100-150
Venue: **CAP15, 13 Quai De Grenelle, 75015, Paris**
Website and registrations:
http://ccafs.cgiar.org/closing-gender-gap

PLENARY SESSIONS

PLENARY 1: OPENING CEREMONY

Cf. page 13

PLENARY 2: GLOBAL DIMENSIONS

Monday, 16 March 2015

11:00–13:00

AUDITORIUM PASTEUR

11:00 PLENARY KEYNOTE P2.1: CLIMATE CHANGE, RISKS, EXTREMES AND UNCERTAINTIES

Climate Change: from global alert to local studies

Le Treut Hervé
Laboratoire de Météorologie Dynamique/ Institut Pierre-Simon Laplace, Université Pierre et Marie Curie, Paris, France

11:30 PLENARY KEYNOTE P2.2: CLIMATE-SMART AGRICULTURE: CONCEPTUAL FRAMEWORK AND BRIEF HISTORY

Climate-Smart agriculture: conceptual framework and brief history

Wang Ren
Assistant Director-General, Agriculture and Consumer Protection Department, FAO

12:00 PLENARY KEYNOTE P2.3: IMPACTS AND ADAPTATION OF AGRICULTURE TO CLIMATE CHANGE AND CLIMATIC VARIABILITY

From climate adaptation assessment to action and back again: a food system perspective

Howden Mark, Crimp Steven, Lim-Camacho Lilly, Dowd Anne-Maree
CSIRO Agriculture, GPO Box 1700, Canberra, ACT 2601, Australia

12:30 PLENARY KEYNOTE P2.4: SUPPLY AND DEMAND BASED GREENHOUSE GAS MITIGATION

Supply and demand based greenhouse gas mitigation

Smith Pete
Institute of Biological Sciences & Scottish Food Security Alliance-Crops, University of Aberdeen, Aberdeen, AB24 3UU, United Kingdom

SPECIAL PLENARY KEYNOTE ON CSA SCIENCE-POLICY INTERFACE: Bringing findings of CSA science to policy-makers

Tuesday, 17 March 2015

9:00–9:30

AUDITORIUM PASTEUR

Bringing findings of "CSA science" to policy makers

Allahoury Amadou
High Level Panel of Experts on Food Security and Nutrition (HLPE), Steering Committee Member
High Commissioner for Food Security to the President of the Republic of Niger

PLENARY 3: KEY QUESTIONS FOR CLIMATE-SMART AGRICULTURE

Tuesday, 17 March 2015

9:30–10:30

AUDITORIUM PASTEUR

9:30 PLENARY KEYNOTE P3.1: RESILIENCE AND ADAPTATION

Adaptation, Resilience and Climate Smart Agriculture – from concepts to action

Meinke Holger[1,2], Baethgen Walter[3] , Meza Francisco[4],Campbell Bruce[5]
[1]*Tasmanian Institute of Agriculture, Schools of Land and Food, University of Tasmania, Hobart, TAS 7001, Australia*
[2]*Centre for Crop Systems Analysis, Wageningen University, the Netherlands*
[3]*IRI, Columbia University, New York, USA*
[4]*Pontificia Universidad Católica de Chile, Santiago, Chile*
[5]*CGIAR Research Program on Climate Change, Agriculture, and Food Security (CCAFS), c/o University of Copenhagen, Denmark*

10:00 PLENARY KEYNOTE P3.2: SUSTAINABLE INTENSIFICATION AND MITIGATION

Sustainable intensification and mitigation

Bustamante Mercedes M.C.
University of Brasilia, Brazil

11:00 PLENARY KEYNOTE P3.3: AGROECOLOGY, SOILS AND ECOSYSTEM ADAPTATION

Agroecology *is* climate smart

Pablo Tittonell[1,2]

[1]*Farming Systems Ecology, Wageningen University, the Netherlands*
[2]*Centre de coopération Internationale en Recherche Agronomique pour le Développement (CIRAD), France*

11:30 PLENARY KEYNOTE P3.4: FOOD SECURITY AND FOOD SYSTEMS

Climate-smart food systems

Vermeulen Sonja J., Porter John R.
Department of Plant and Environmental Sciences, University of Copenhagen, Thorvaldsensvej 40, 1871 Frederiksberg C., Denmark

SPECIAL PLENARY KEYNOTE ON LAND DEGRADATION, DESERTIFICATION

Tuesday, 17 March 2015

12:00–12:30

AUDITORIUM PASTEUR

The tragedy of the commons revisited: land degradation and desertification on public lands

Payne William A.
University of Nevada, USA

PLENARY P4: FEEDBACK FROM L1 PARALLEL SESSIONS (towards regional science agendas). Cf. page 16

Wednesday, 18 March 2015

13:30–14:10

AUDITORIUM PASTEUR

PLENARY P5: FEEDBACK FROM L2 PARALLEL SESSIONS Cf page 20

Wednesday, 18 March 2015

14:10–14:50

AUDITORIUM PASTEUR

PLENARY P6: FEEDBACK FROM L3 PARALLEL SESSIONS Cf. page 20

Wednesday, 18 March 2015

14:50–15:30

AUDITORIUM PASTEUR

PLENARY P7: ROUND TABLE on What are the expectations from End-users and Policy makers towards the Scientific community?

Cf. page 20

Wednesday, 18 March 2015

16:00–17:30

AUDITORIUM PASTEUR

PLENARY P8: TOWARDS A CSA SCIENCE ROADMAP from Montpellier to the next CSA conference Formal closing session.

Cf. page 20

Wednesday, 18 March 2015

17:30–18:30

AUDITORIUM PASTEUR

PARALLEL SESSION L1 REGIONAL DIMENSIONS

Monday, 16 March 2015

14:00–18:00

ORAL PRESENTATIONS

PARALLEL SESSION L1.1 AFRICA

ROOM SULLY 1

KEYNOTE PRESENTATIONS

14:00 Engendering climate resilient agricultural livelihoods in Africa

Opondo Maggie[1], Nyasimi Mary[2]
[1]*Institute for Climate Change & Adaptation, University of Nairobi, Kenya*
[2]*International Livestock Research Institute, Nairobi, Kenya*

14:30 Integrating Ecosystem-based Adaptation and Mitigation in Africa: Policy and Practice

Locatelli Bruno
CIRAD-CIFOR, Montpellier 34098, France

CONTRIBUTED ORAL PRESENTATIONS

16:30 Climate smart practices impact soil organic carbon storage in Madagascar

Razafimbelo Tantely[1], Razakamanarivo Herintsitohaina[1], Rafolisy Tovonarivo[1], Rakotovao Narindra[1], Saneho Tiana[1], Andriamananjara Andry[1], Rakotosamimanana Stéphan[2], Deffontaines Sylvain[2], Virginie Falinirina[1], Laetitia Bernard[3], Dominique Masse[3], Albrecht Alain[3]
[1]*Laboratoire des Radioisotopes, Université d'Antananarivo, BP 3383, Antananarivo, Madagascar*
[2]*Agrisud International, Lot VL32M Androndra, 101 Antananarivo, Madagascar*
[3]*Institut de Recherche pour le Développement, UMR Eco&Sols, 34060 Montpellier, France*

16:45 A modelling framework to assess climate change and adaptation impact on heterogeneous crop-livestock farming communities

Descheemaeker Katrien[1], Masikati Patricia[2], Homann-Kee Tui Sabine[3], Chibwana Gama Arthur[4], Crespo Olivier[5], Claessens Lieven[6], Walker Sue[7]
[1]*Plant Production Systems, Wageningen University, PO Box 430, 6700 AK Wageningen, The Netherlands*
[2]*World Agroforestry Centre (ICRAF), Lusaka, Zambia*
[3]*International Crops Research Institute for the Semi-Arid Tropics (ICRISAT), P O Box 776, Matopos, Bulawayo, Zimbabwe*
[4]*Lilongwe University of Agriculture and Natural Resources, P.O. Box 21,9 Lilongwe, Malawi*
[5]*Climate System Analysis Group, Environmental and Geographical Science Dept., University of Cape Town, Rondebosch, South Africa*
[6]*International Crops Research Institute for the Semi-Arid Tropics (ICRISAT), P.O. Box 39063, 00623 Nairobi, Kenya*
[7]*Crops For the Future Research Centre, Semenyih, Selangor Darul Ehsan, Malaysia*

17:00 Closing yield gaps to increase food supply and mitigate GHG emissions for African smallholders

Henderson Ben[1], van Wijk Mark[2], Rigolot Cyrille[1], Silvestri Silvia[2], Douxchamps Sabine[2], Herrero Mario[1]
[1]*CSIRO, 306 Carmody Rd, St Lucia, 4067, Australia*
[2]*ILRI, Nairobi 00100, Kenya*

17:15 Potential for taking climate smart agricultural practices to scale: examples from Sub-Saharan Africa

Tesfaye Kindie[1], Cairns E. Jill[2], Misiko Michael[1], Stirling Clare[3], Abate Tsedeke[4], Prasanna B.M.[4], Mekuria Mulugeta[4]
[1]*International Maize and Wheat Improvement Center (CIMMYT), Addis Ababa, Ethiopia*
[2]*CIMMYT, Harare, Zimbabwe*
[3]*CIMMYT, London, United Kingdom*
[4]*CIMMYT, Nairobi, Kenya*

PARALLEL SESSION L1.2 AUSTRALASIA

ROOM SULLY 2

KEYNOTE PRESENTATIONS

14:00 Climate-smart agriculture in South Asia: opportunities and constraints in scaling out

Aggarwal Pramod
Aggarwal Pramod[1], Kahtri-Chettri Arun[1], Bhaskar Shirsath P.[1], Jat M.L.[2], Joshi P.K.[3]
[1]*CGIAR Research Program on Climate Change, Agriculture and Food Security, International Water Management Institute, New Delhi-110012, India*
[2]*CIMMYT, New Delhi-110012, India*
[3]*IFPRI, New Delhi-110012, India*

14:30 Promotion of climate resiliency for food security in the association of Southeast Asian nations: regional policy making and funding opportunities

Bacudo Imelda
ASEAN-German Programme on Response to Climate Change, GAPCC
GIZ Jakarta

CONTRIBUTED ORAL PRESENTATIONS

16:30 Integrated rice-shrimp as a smart strategy to cope with climate change in the Mekong Delta, Vietnam

Trinh Q. Tu[1], Tran V. Nhuong[2], Phan T. Lam[3]
[1]*Research Institute for Aquaculture No.1 (RIA1, Dinh Bang, Tu Son, Bac Ninh, Viet Nam*
[2]*WorldFish Center (WFC, Jalan Batu Maung, Batu Maung, 11960 Bayan Lepas, Penang, Malaysia*
[3]*Research Institute for Aquaculture No.2 (RIA2), No. 116 Nguyen Dinh Chieu, District 1, Ho Chi Minh City, Viet Nam*

16:45 Changing rainfall pattern in Northeast Thailand and implications for cropping systems adaptation

Lacombe Guillaume[1], Trébuil Guy[2]
[1]*International Water Management Institute (IWMI), Southeast Asia Regional Office, PO Box 4199, Vientiane, Lao PDR*
[2]*Centre de coopération Internationale en Recherche Agronomique pour de Développement (CIRAD), UMR Innovation, 34398 Montpellier Cedex 5, France*

17:00 A review of contributions that the System of Rice Intensification (SRI) can make to climate-smart agriculture

Uphoff Norman
SRI-Rice, Cornell University, Ithaca, NY 14853, USA

17:15 Development of climate resilient villages

Sikka A.K.[1], Prasad Y.G.[2], Srinivasarao C.H.[2]
[1]*Indian council of agricultural research, New Delhi 110 012, India*
[2]*ICAR-central research institute for dryland agriculture, Santoshnagar, Hyderabad 500059, India*

PARALLEL SESSION L1.3 LATIN AMERICA

ROOM SULLY 3

KEYNOTE PRESENTATIONS

14:00 Are we adapting to climate change? The case of the Chilean agricultural sector

Aldunce Paulina, Lillo G.
Universidad de Chile, Chile

14:30 Economic valuation of mangrove´s ecosystem services in Gulf of Nicoya, Costa Rica

Arguedas-Marín Maureen, Cifuentes Miguel, Mercado Leida, Bouroncle Claudia
Centro Agronómico Tropical de Investigación y Enseñanza (CATIE), 7170 CATIE, Turrialba, 30501 Costa Rica

CONTRIBUTED ORAL PRESENTATIONS

16:30 The experience in policy dialogue for agriculture and climate change in LAC countries: an overview

Schlaifer Michel[1], Rodriguez Adrián[2], Meza Laura[3]
[1]*French Embassy – ECLAC, Santiago, Chile*
[2]*ECLAC, Agricultural Development Unit, Santiago, Chile*
[3]*FAO, Santiago, Chile*

16:45 Implications of losing the complementariness of gender roles on CSA strategies in the Peruvian Altiplano

Turin Cecilia[1,2], Valdivia Roberto[1], Quiroz Roberto[1,2], Mares Victor[1,2]
[1]*International Potato Center (CIP), Global Program on Crop Systems Intensification and Climate Change (CSI-CC), Lima, Peru*
[2]*CGIAR Research Program on Climate Change, Agriculture and Food Security (CRP CCAFS)*

17:00 How do coffee farmers adapt to perceived changes in climate? Evidence from Central America

Saborio-Rodriguez Milagro[1,2], Alpizar Francisco[1], Harvey Celia[3], Martínez Ruth M.[3], Vignola Raffaele[1]
[1]*CATIE, Apdo 7170, Turrialba, Costa Rica*
[2]*University of Costa Rica, 11501, San Pedro de Montes de Oca, Costa Rica*
[3]*Conservation International, Arlington, VA 22202, USA*

17:15 Practices and enabling conditions for climate-smart agriculture: current status in seven countries in Latin America

Bouroncle Claudia[1], Corner-Dolloff Caitlin[2], Halliday Andrew[3], Nowak Andreea[2], Zavariz Beatriz[2], Argote Karolina[2], Baca Maria[4] Fallot Abigail[1,5], Le Coq Jean-Francois[5]
[1]*CATIE-Climate Change and Watershed Program; 30501 Turrialba, Costa Rica*
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[3]*CATIE, consultant*
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[5]*CIRAD UMR ART-DEV, 34000 Montpellier, France*

PARALLEL SESSION L1.4 EUROPE

ROOM RONDELET

KEYNOTE PRESENTATIONS

14:00 EU-funded research & innovation activities in support to Climate Smart Agriculture

Kolar Patrik
Head of Unit "Agri-food Chain", DG Research and Innovation, European Commission, Pl. Rogier 16, BE-1049 Brussels, Belgium

14:30 FACCE-JPI: a European partnering initiative to tackle food security and climate change – one of the greatest societal challenges

Gøtke Niels
Chair of the FACCE-JPI Governing Board

CONTRIBUTED ORAL PRESENTATIONS

16:30 Wheat yield sensitivity to climate change across a European transect for a large ensemble of crop models

Pirttioja Nina[1], Carter Timothy R.[1], Fronzek Stefan[1], Bindi Marco[2], Hoffmann Holger[3], Palosuo Taru[4], Ruiz-Ramos Margarita[5], Tao Fulu[4], Trnka Miroslav[6,7], Acutis Marco[8], Asseng Senthold[9], Baranowski Piotr[10], Basso Bruno[11], Bodin Per[12], Buis Samuel[13], Cammarano Davide[14], Deligios Paola[15], Destain Marie-France[16], Dumont Benjamin[16], Ewert Frank[3], Ferrise Roberto[2], François Louis[16], Gaiser Thomas[3], Hlavinka Petr[6,7], Jacquemin Ingrid[16], Kersebaum Kurt Christian[17], Kollas Chris[17], Krzyszczak Jaromir[10], Lorite Ignacio J.[18], Minet Julien[16], Minguez M. Ines[5], Montesino Manuel[19], Moriondo Marco[20], Müller Christoph[21], Nendel Claas[17], Öztürk Isik[22], Perego Alessia[8], Rodríguez Alfredo[5],. Ruane Alex C.[23,24], Ruget Françoise[13], Sanna Mattia[8], Semenov Mikhail[25], Slawinski Cezary[10], Stratonovitch Pierre[25], Supit Iwan[26], Waha Katharina[21], Wang Enli[27], Wu Lianhai[28], Zhao Zhigan[27,29], Rötter Reimund P.[4]
[1]*Finnish Environment Institute (SYKE), 00250 Helsinki, Finland*
[2]*University of Florence, 50144 Florence, Italy*
[3]*INRES, University of Bonn, 53115 Bonn, Germany*
[4]*Luke Natural Resources Institute, 00790 Helsinki, Finland*

[5]*Universidad Politecnica de Madrid, 28040 Madrid, Spain*
[6]*Institute of Agrosystems and Bioclimatology, Mendel University in Brno, Brno 613 00, Czech Republic*
[7]*Global Change Research Centre AS CR, 603 00 Brno, Czech Republic*
[8]*University of Milan, 20133 Milan, Italy*
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[11]*Michigan State University, East Lansing, MI 48824, USA*
[12]*Lund University, 223 62 Lund, Sweden*
[13]*INRA, UMR 1114 EMMAH, F-84914 Avignon, France*
[14]*James Hutton Institute, Invergowrie, Dundee, DD2 5DA, Scotland*
[15]*University of Sassari, 07100 Sassari, Italy*
[16]*Université de Liège, 4000 Liège, Belgium*
[17]*Leibniz Centre for Agricultural Landscape Research (ZALF), 15374 Müncheberg, Germany*
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[19]*University of Copenhagen, 2630 Taastrup, Denmark*
[20]*CNR-IBIMET, 50145 Florence, Italy*
[21]*Potsdam Institute for Climate Impact Research, 14473 Potsdam, Germany*
[22]*Aarhus University, 8830 Tjele, Denmark*
[23]*NASA Goddard Institute for Space Studies, New York, NY 10025, USA*
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[27]*CSIRO Agriculture Flagship, 2601 Canberra, Australia*
[28]*Rothamsted Research, North Wyke, Okehampton EX20 2SB, United Kingdom*
[29]*China Agricultural University, 100094 Beijing, China*

16:45 Economic assessment of greenhouse gas mitigation on livestock farms

Eory Vera[1], Faverdin Philippe[2], O'Brien Donal[3]
[1]*Scotland's Rural College (SRUC), Land Economy, Environment & Society, EH9 3JG, Edinburgh, United Kingdom*
[2]*INRA, UMR Physiologie, Environnement et Génétique pour l'Animal et les Systèmes d'Élevage, F-35000 Rennes, France*
[3]*Teagasc, Animal & Grassland Research and Innovation Centre, Moorepark, Fermoy, Co Cork, Ireland*

17:00 Agricultural adaptation to climate change in the European Union

Trapp Natalie, Schneider Uwe A.
Universität Hamburg, KlimaCampus, Research Unit Sustainability and Global Change, Grindelberg 5, 20144 Hamburg, Germany

17:15 Legume supported cropping systems for Europe (Legume Futures)

Rees R.M.[1], Stoddard, F.[2], Iannetta, P.[3], Williams, M.[4], Zander, P.[5], Murphy-Bokern, D.[6], Topp, C.F.E.[1], Watson, C.A.[1]
[1]*Scotland's Rural College, Edinburgh EH9 3JG, United Kingdom*
[2]*Department of Agricultural Sciences, 00014 University of Helsinki, Finland*
[3]*James Hutton Institute, Dundee, United Kingdom*
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[5]*Leibniz Centre for Agricultural Landscape Research (ZALF), 15374 Müncheberg, Germany*
[6]*Lohne, 49393 Germany*

PARALLEL SESSION L1.5 NORTH AMERICA

ROOM BARTHEZ

KEYNOTE PRESENTATIONS

14:00 Building climate smart, sustainable, intensive agriculture for the 21st century and beyond

Walthall Charles[1], Hatfield Jerry[2], Schneider Sally[3], Boggess Mark[4]
[1]*National Program Leader, Natural Resources & Sustainable Agriculture Systems Research*
[2]*Laboratory Director & Supervisory Plant Physiologist, National Laboratory for Agriculture & Environment*

[3]*Deputy Administrator, Natural Resources & Sustainable Agriculture Systems Research*
[4]*Center Director, U.S. Dairy Forage Research Center, USDA Agricultural Research Service*

14:30 Scientific article summarizing the 2013 CSA Global Science Conference in North America

Jackson Louise E.[1], Steenwerth K.L.[2]
[1]*Department of Land, Air and Water Resources, University of California Davis, USA*
[2]*Crops Pathology and Genetics Research Unit, Agricultural Research Service, United States Department of Agriculture (ARS/USDA), USA*

CONTRIBUTED ORAL PRESENTATIONS

16:30 The 4-R nutrient stewardship and its role in climate smart agriculture

Khosla Raj, Longchamps Louis, Reich R.
Department of Soil & Crop Sciences, Colorado State University, Fort Collins, CO, USA

16:45 From climate variability to climate change: building adaptive capacity among row crop farmers in the Southeastern USA

Ortiz Brenda V.[1], Fraisse Clyde[2], Dourte Daniel[2], Bartels Wendy-Lin[2], Zierden David[3], Knox Pam[4], Risse Mark[4], Vellidis George[4], Templeton Scott[5], Thomas Michel[6]
[1]*Auburn University, Crop, Soil, and Environmental Sciences Department, 36849, Auburn, Alabama, USA*
[2]*University of Florida, Biological and Agricultural Engineering Department, Gainesville, Florida, USA*
[3]*Florida State University, Center for Ocean-Atmospheric Prediction Studies (COAPS), 32310, Tallahassee, Florida, USA*
[4]*University of Georgia, Crop and Soil Sciences Department, 30602, Athens, Georgia, USA*
[5]*Clemson University, Department of Economics, 29631, Clemson, South Carolina, USA*
[6]*Florida A&M University, Department of Agribusiness, 32307, Tallahassee, Florida, USA*

17:00 Climate-Smart Agriculture and Water Management in California

Sandoval Solis Samuel
University of California, Davis One Shields Avenue Davis, California - CA 95616, USA

17:15 Dealing with climate and yield variability: the role of precision agricultural technologies and crop models

Basso Bruno[1], Robertson G. Philip[2], Hatfield Jerry[3]
[1]*Department of Geological Sciences and W.K. Kellogg Biological Station, Michigan State University East Lansing, Michigan 48823, USA*
[2]*Department of Plant, Soil and Microbial Sciences and W.K. Kellogg Biological Station, Michigan State University East Lansing, Michigan 48823, USA*
[3]*National Laboratory for Agriculture and Environment, Ames, Iowa 50011, USA*

POSTER SESSION 1

Monday, 16 March 2015

15:00 – 16:30

EXHIBITION HALL, LEVEL 0

L1.1 AFRICA

1. Is conservation agriculture a climate-smart option for smallholders in sub-Saharan Africa?

Bruelle Guillaume[1], Naudin Krishna[2], Scopel Eric[2], Corbeels Marc[2], Torquebiau Emmanuel[2], Penot Eric[3], Rabeharisoa Lilia[4], Mapfumo Paul[5], Tittonell Pablo[6]

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[2]CIRAD, UPR AÏDA, 34398, Montpellier, France
[3]CIRAD, UMR Innovation, 34398, Montpellier, France
[4]Université d'Antananarivo, LRI, 101, Antananarivo, Madagascar
[5]University of Zimbabwe, SOFECSA, 00263, Harare, Zimbabwe
[6]Wageningen University, FSE, 6708 PB, Wageningen, the Netherlands

2. From time uncertainties to climate-smart agriculture in the Sudano-Sahelian zone of Cameroon

Fofiri Nzossie Eric Joël[1], Bring[2], Temple Ludovic[3], Wakponou Anselme[4]

[1]Département de géographie, Université de Ngaoundéré BP 454, Cameroon
[2]Département de géographie, Université de Ngaoundéré BP 454, Cameroon
[3]Cirad, UMR Innovation, B15, 73 rue JF. Breton 34398 Montpellier, France
[4]Département de géographie, Université de Ngaoundéré, BP 454, Cameroon

3. Feeding Ethiopia in changing context: from diagnosis to exploration of climate smart options

Mezegebu Getnet[1,2,3], Martin van Ittersum[1], Katrien Descheemaeker[1], Huib Hengsdijk[2]

[1]Plant Production Systems group, Wageningen University, P.O. Box 430, 6700 AK Wageningen, the Netherlands
[2]Plant Research International, Wageningen University and Research, P.O. Box 616, 6700 AP Wageningen, the Netherlands
[3]Ethiopian Institute of Agricultural Research, Melkassa Research Centre, P.O. Box 436, Nazareth, Ethiopia

4. Macroalgae as biostimulants of growth and enhance tolerance to Moroccan wheat plants cultivated under salt stress

Latique Salma, Chernane Halima, Mansouri Mounir, El Kaoua Mimoun

Cadi Ayyad University /Department of Biology, Laboratory of Biotechnology, Valorization and Protection of Agro-Resources, Marrakech, Morocco

5. Improving the resilience of fishery stakeholders to the climate change effects. Case of Saint-Louis, Senegal

Diallo Aminata[1], Sarr Benoit[2], Thiao Djiga[3], Sall Moussa[4]

[1]Centre for Oceanographic Research Dakar,Thiaroye, Senegal (up to october 2014), Fann Résidence, Dakar, Senegal
[2]Agro meteorologist Engineer and Coordinator of Master Climate Change and Sustainable Development Program, Scientific Coordinator of the Global Alliance against Climate Change Project (Regional Centre AGRYMET), Niger
[3] Researcher and statistician at the Centre for Oceanographic Research Dakar / Thiaroye, Senegal
[4] Regional Coordinator of the MOLOA to the Ecological Monitoring Centre

6. Comparative assessment of maize, finger millet and sorghum for household food security under increasing climatic risk

Rurinda Jairos[1,2,3], Mapfumo Paul[2,3], van Wijk T. Mark[1,4], Mtambanengwe Florence[2,3], Rufino C. Mariana[4], Chikowo Regis[2,3], Giller E. Kenneth[1]

[1]Plant Production Systems, Wageningen University, P.O. Box 430, 6700AK Wageningen, The Netherlands
[2]Department of Soil Science and Agricultural Engineering, University of Zimbabwe, P.O. Box MP167, Mount Pleasant, Harare, Zimbabwe
[3]Soil Fertility Consortium for Southern Africa (SOFECSA), CIMMYT, Southern Africa, P.O. Box MP 163, Mount Pleasant, Harare, Zimbabwe
[4]International Livestock Research Institute (ILRI), Box 30709, Nairobi 00100, Kenya

7. Choice and risks of management strategies of farming calendar: application to corn production in Southern Benin

Alle C. S. Ulrich[1], Baron Christian[2], Guibert Hervé[2], Agbossou K. Euloge[1], Afouda A. Abel[1]

[1]*Université d'Abomey - Calavi, Republic of Benin*

[2]*CIRAD, France*

8. Land cover changes along tropical highland agroforestry systems: call for an improved climate adaptation

Matokeo Arbogast[1], Lyimo James[1], Lelong Camille[2], Majule Amos[1], Masao Catherine[1], Mathé Pierre-Etienne[3], Vaast Philippe[4], Williamson David[4,5]

[1]*Institute of Resource Assessment, University of Dar es Salaam, P.o.Box 35 097 Dar es Salaam, Tanzania*

[2]*Cirad-TETIS, Maison de la Télédétection, 34093 Montpellier Cedex 5, France*

[3]*CEREGE, Aix-Marseille Université, BP 80, 13 545 Aix-en-Provence cedex 04, France*

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[6]*LOCEAN, Université Pierre et Marie Curie-IRD-CNRS-MNHN, Centre IRD France Nord, 93 143 Bondy cedex, France*

9. Ecological intensification for a climate smart agriculture: applications from Senegal and Burkina Faso

Masse Dominique[1], Ndour-Badiane Ndèye Yacine[2], Hien Edmond[3], Akpo Léonard-Elie[4], Diatta Sekouna[4], Bilgo Ablassé[5], Hien Victor[5], Diédhiou Ibrahima[6], Ndiaye-Cissé Mame Farma[2], Tall Diouf Laure[2], Ndienor Moussa[2], Founoune Mboup Hassna[3], Feder Frédéric[7], Médoc Jean-Michel[7], Lardy Lydie[1], Assigbetsé Komi[1], Cournac Laurent[1]

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[3]*LMI IESOL, UFR SVT, Université de Ouagadougou, Ouagadougou, Burkina Faso*

[4]*LMI IESOL, Département de Biologie Végétale, Université Cheikh Anta Diop, Dakar, Senegal*

[5]*LMI IESOL, Département GRN/SP, Institut Nationale de l'Environnement et de la Recherche Agricole. Ouagadougou, Burkina Faso*

[6]*LMI IESOL, Ecole Nationale des Sciences Agronomiques, Université de Thiès, Thiès, Senegal*

[7]*LMI IESOL, UPR Recyclage et risques, CIRAD, Dakar, Senegal*

10. Incorporating climate change into agricultural research and advisory services in Africa

Lamboll Richard[1], Morton John[1], Kisauzi Dan[2], Ohiomoba Ifidon[3], Demby Dady[3], Mangheni Margaret[4], Moumouni Ismail[5], Parkinson Verona[6], Suale David[7], Nelson Valerie[1], Quan Julian[1]

[1]*Natural resources Institute, University of Greenwich, ME4 4TB, United Kingdom*

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[3]*The Forum for Agricultural Research in Africa (FARA), 12 Anmeda Street, Roman Ridge, Accra, Ghana*

[4]*Agricultural Extension/ Education Department, Makerere University, P.O. Box, 7062, Kampala, Uganda*

[5]*University of Parakou, BP 123, Parakou, Benin*

[6]*AGEMA Consultancy Services, C.P 437, Quelimane, Mozambique*

[7]*Independent consultant and AFAAS Sierra Leone, P O Box 7, Freetown, Sierra Leone*

11. Developing community-based climate smart agriculture through participatory action research in West Africa: lesson learnt

Akponikpe P.B. Irenikatche[1], Bayala Jules[2], Zougmore Robert[3]

[1]*Université de Parakou (UP), Faculté d'Agronomie (FA), Unit of Environmental Soil Physics and Hydraulics (ESPH), 03 BP 351 Université, Parakou, Bénin*

[2]*World Agroforestry Centre, West Africa and Central Regional Office - Sahel Node, BP E5118, Bamako, Mali*

[3]*CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS), ICRISAT Bamako, BP 320 Bamako, Mali*

12. Indigenous Climate Smart Agriculture (iCSA); local knowledge pool from urban vegetable farmers

Kweku Oduro Koranteng

Dept. of Public Admin and Health Services, Uni of Ghana Business Sch., Ghana

13. Mitigation of climate change through soil organic carbon sequestration in smallholder farming systems of Zimbabwe

Mujuru Lizzie[1], Mureva Admore[1], Velthorst Eef, J.[2], Hoosbeek Marcel R.[2]
[1]*Bindura University of Science Education, Dept. of Environmental Science, P. bag 1020, Bindura, Zimbabwe*
[2]*Wageningen University, Dept. of Environmental Sciences, Earth System Science, P.O. Box 47, 6700 AA Wageningen, The Netherlands*

14. Climate-smart intensification of West-Africa's cocoa systems

van Asten Piet[1], Jassogne Laurence[1], Vaast Philippe[2] Laderach Peter[3], Schroth Götz[4], Lundy Mark[3], Asare Richard[5], Muilerman Sander[5], Ruf R.[6], Snoeck Didier[6], Koko Louis[7], Anim-Kwapong Gilbert[8], Rossing Walter[9], Gockwoski James[5], Giller Ken[9], Six Johan[10], Vanlauwe Bernard[11]
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[2]*ICRAF, Nairobi, Kenya*
[3]*CIAT, Cali, Colombia*
[4]*Rainforest Alliance, Wageningen, the Netherlands*
[5]*IITA, Accra, Ghana*
[6]*CIRAD, Montpellier, France*
[7]*CNRA, Abidjan, Cote d'Ivoire*
[8]*CRIG, Kumasi, Ghana*
[9]*WUR, Wageningen, the Netherlands*
[10]*ETH, Zurich, Switzerland*
[11]*IITA, Nairobi, Kenya*

15. Effect of oil and addition of enzymes on fibre digestion, methane production and performance of sheep

Booyse Maruzaan, Hassen Abubeker
Department of Animal and Wildlife Sciences, University of Pretoria, Pretoria 0002, South Africa

16. Drought and adaptation strategies of rural maize-legume farmers in Kenya and Tanzania

Muricho Geoffrey[1], Tongruksawattana Songporne[1], Mutheu Judith[2]
[1]*International Maize and Wheat Improvement Center (CIMMYT), Nairobi, Kenya*
[2]*African Economic Research Consortium, Nairobi, Kenya*

17. Biochar as an opportunity for climate-smart agriculture in small-holder farming systems in Kenya

Sundberg Cecilia[1], Karltun Erik[1], Mahmoud Yahia[2], Nyberg Gert[1], Njenga Mary[3], Roobroeck Dries[4], Röing de Nowina Kristina[4]
[1]*Swedish University of Agricultural Sciences 750 07 Uppsala Sweden*
[2]*Lund University, Sweden*
[3]*World Agroforestry Centre, ICRAF, UN Avenue, Nairobi, Kenya*
[4]*International Institute of Trobical Agriculture (IITA) Nairobi, Kenya*

18. Farmers' perceptions of rainfall and agronomic trends in Allada plateau in southern Benin

Alle Cayossi S. Ulrich[1], Guibert Hervé[2], Baron Christian[2], Agbossou Euloge K.[1], Afouda Abel A.[1]
[1]*Université d'Abomey Calavi, Bénin*
[2]*CIRAD, France*

19. Climate and maize storage losses from insect pests in East and Southern Africa

De Groote Hugo, Gitonga Zachary, Sonder Kai, Mugo Stephen, Tefera Tadele
CIMMYT, PO Box 1041-00621 Nairobi, Kenya

20. Maize-based farm household typology and vulnerability to climate shocks in Kenya

Tongruksawattana Songporne[1], Lopez-Ridaura Santiago[2], Tesfaye Kindie[3], Frelat Romain[2], Gitonga Zachary[1]
[1]*International Maize and Wheat Improvement Center (CIMMYT), Nairobi, Kenya*
[2]*International Maize and Wheat Improvement Center (CIMMYT), El Batan, Mexico*
[3]*International Maize and Wheat Improvement Center (CIMMYT), Addis Ababa, Ethiopia*

21. Changing crop practices to address climate related risks among rural farmers in Nyando, western Kenya

Recha John, Kinyangi James, Radeny Maren
CGIAR Research Program on Climate Change, Agriculture and Food Security, East Africa Region, International Livestock Research Institute, P. O. Box 30709 - 00100 Nairobi, Kenya

22. Establishing an operational dialogue between researchers and decision-makers for adaptation to climatic changes in Mali

Sogoba Bougouna[1], Ba Allassane[2], Zougmore Robert[3], Samake Oumar B.[4]
[1]*ONG AMEDD, BP: 212, Koutiala, Mali*

[2]*Conseiller spécial du premier ministre du Mali ; BP: 2357, Bamako, Mali*
[3]*ICRISAT, BP:320 Bamako, Mali*
[4]*ONG AMEDD, BP:212, Koutiala, Mali*

23. Women involvement in agricultural water management: example from supplemental irrigation in the Burkinabe Sahel

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24. Assessing potential climate change impacts in smallholder systems in Burkina Faso

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25. Micro-level appraisal of success stories of pro-poor climate adaptation and mitigation field experiences

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26. Economic analysis of effect of flood on income distribution among farmers in Edo State, Nigeria

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27. Identifying farm-level hotspots to target greenhouse gas measurements in smallholder crop-livestock systems

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28. Intensification test on maize production in the Sudano-Sahelian zone: techniques, soils, climate and economic conditions

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29. Profile of climate smart agricultural technologies in the dry Guinea savannah and forest zones in Ghana

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30. Contribution to the valorisation of forest species potentialities in promoting climate smart agriculture in Madagascar

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31. Optimizing rhizosphere microbiology and hydrology of shrub-intercropping for buffering climate change in the Sahel

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32. Native shrub management on soil nematofauna: optimization and adaptation to climate change of Sahelian agroecosystems

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33. Optimal rice cropping systems under uncertainty: case of West Africa Rice Sector Development Hubs

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34. Effects of intensification of maize and rice production in Tanzania on productivity and environmental impacts

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35. Small farming food versus ethanol sugarcane: global constraints and local opportunities for irrigation in Ghana

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36. Nutritive quality of dominant forage species in response to simulated drought in sub-tropical native pasture

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37. Variability of effects of compost on nodulation, N acquisition and yield of cowpea in sub-Saharan areas of Burkina Faso

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38. Potentials of medicinal plants extracts on digestibility, in vitro methane gas production of Eragrostis curvula forage

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39. Food security patterns at farm household level: key drivers and options for climate-smart agricultural interventions

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40. Analysis of the impact of climate changes in the last thirty years on the second generation of cocoa in Côte d'Ivoire

Kassin Koffi Emmanuel[1], Yao Guy Fernand[1], Diedhiou Arona[2], Koko Louis Kan Anselme[3], Assiri Assiri Alexis[3], Kouamé Brou[1], Konaré Abdourahamane[4], Kouassi Koffi Nazaire[5], Yoro Gballou René[1]

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41. Carbon footprinting of the Irish potato production systems in Zimbabwe

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42. Farmers' access to agrometeorological services in Ido local government area of Oyo state, Nigeria

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43. Impact of dry-wet cycles on carbon mineralization of tropical soils

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44. Impact of climate change and desertification on agriculture and food security in Côte d'Ivoire

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45. Exploring institutional dimension of climate-smart agriculture in Nigeria

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46. Critical reflection on knowledge and narratives of conservation agriculture in Zambia

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47. Positive effect of climate change on cotton and rice in Africa and Madagascar

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48. Modeling potential impact of climate change on sorghum and cowpea yields in semi-arid areas of Kenya

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49. Gender analysis of adaptation strategies of water stress among crop farmers in Asa local government area of Kwara State

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50. Matching uses and functional traits of companion trees in cocoa agroforests: a win-win scheme toward resilient systems

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51. Water requirements for potato production under climate change

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52. How smart is Climate Smart Agriculture (CSA)? – Lessons from Northern Nigeria

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53. Integrating climate smart agriculture for food security: the role of private sector investment in Africa

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54. Climate variability and Impacts on the population of leaf miner, a pest of the Oil Palm in Nigeria

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L1.2 AUSTRALASIA

55. The agro-potential of Western Siberia territories in a changing climate

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56. Ecological intensification through conservation agriculture in Cambodia: impact on SOC, N and enzymatic activities

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57. Net ecosystem exchange of carbon dioxide and methane in rice fields of northern Indo-Gangetic Plains

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58. Are tree plantations climate-smart? The case of rubber tree plantations and the natural rubber commodity chain

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59. Potential integrated agricultural technologies for climate-smart villages of Southeast Asia

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60. Enhancing productivity and livelihoods among smallholder irrigators through Biochar and fertilizer amendments

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61. Climate change and agriculture in India

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62. A suitability assessment for "alternate wetting and drying": targeting priority areas for mitigation in rice production

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L1.3 LATIN AMERICA

63. Learning to face the challenges posed by climate change to Andean agriculture: teaching the farmers of the future

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64. Comparison between a Tier 3 and Tier 2 approach to estimate enteric methane emission in Brazilian beef cattle

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65. Effect of climate variability and climate change in the agricultural sector of Panama.

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66. Adaptation of small coffee producers to climate change in Nicaragua

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67. Can CO_2 fertilization compensate for progressive climate change impacts on coffee productivity?

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68. Agricultural practices, agroecological integrated farms and sustainable indigenous territorial development in Honduras

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69. Methane emission efficiency as a function of grazing management in Southern Brazilian grazing systems

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70. Technological options to increase resilience of production systems to extreme climate events

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71. Supporting dairy family farmers of Pernambuco state (Brazil) to develop a climate-smart agriculture

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72. Energy efficiency of beef cow herds with different calving season in the south-east of Buenos Aires province, Argentina

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73. Does diversification in smallholder coffee landscapes help to face climate change risk? Answers from Nicaragua

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74. Ensuring climate smart agriculture is gender-smart: lessons from Latin America

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75. Do local perceptions converge to climatological data? Case studies in three Brazilian biomes

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[1]*Centro de Desenvolvimento Sustentável - CDS, Campus Universitário Darcy Ribeiro - Gleba A - Asa Norte – Brasília-DF, CEP 70.904-970, Brazil*
[2]*Universidade do Estado de Mato Grosso, Av. Tancredo Neves, 1095 - Cavalhada II, 78200-000 - Cáceres - Mato Grosso, Brazil*
[3]*ERIS-CMH, 48 bd Jourdan, 75014 Paris, France*

76. Does carbon storage of pastures contribute to a climate smart cattle farming after Amazonian deforestation?

Blanfort Vincent[1], Stahl Clément[1,2], Fontaine Sébastien[3], Picon-Cochard Catherine[3], Freycon Vincent[4], Blanc Lilian[4], Bonal Damien5, Soussana Jean-François[3], Lecomte Philippe[1], Klumpp Katja[3]
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[4]*CIRAD, UR 105 "Biens et services des écosystèmes forestiers tropicaux", 34398 Montpellier, France*
[5]*INRA, UMR 1137 EEF, 54280 Champenoux, France*

77. Socio-economic scenarios to develop and test agricultural adaptation policies in Central America and the Andes

Veeger Marieke, Vervoort Joost
University of International Cooperation (UCI), De la Rotonda El Farolito, 200m este y 150m norte, Barrio Escalante, San José, Costa Rica

78. Future climate change impacts on maize production in the Cerrado of Brazil

Silva Fernando Macena[1], Affholder François[2], Corbeels Marc[1,2]

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[2]*CIRAD, Agroécologie et intensification durable des cultures annuelles, 34398 Montpellier, France*

79. Agro-Climatic forecasting system for better decision making in Latin America

Giraldo Diana, Barrios Camilo, Arango David, Obando Diego
International Center for Tropical Agriculture (CIAT), Climate and crop modeling team in DAPA. Km 17, Recta Cali-Palmira, Valle Del Cauca, Colombia

80. LivestockPlus: supporting low emission development for livestock sector in Costa Rica and Colombia

Rao Idupulapati[1], Jenet Andreas[2], Tapasco Jeimar[1], Chirinda Ngonidzashe[1], Rosenstock Todd[3], Twyman Jennifer[1], Laderach Peter[1], Peters Michael[1], Arango Jacobo[1], Hyman Glenn[1], Barahona Rolando[4], Nelson Vivas[5], Camilo Plazas[6], Mauricio Chacon[7]
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[2]*CATIE, Turrialba, Costa Rica*
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[5]*University of Cauca, Popayan, Colombia*
[6]*University of Llanos, Villavicencio, Colombia*
[7]*Ministry of Agriculture and Livestock, San José, Costa Rica*

81. Venezuelan agriculture N management challenges and proposed alternatives

Pérez Tibisay, Marquina Sorena
Centro de Ciencias Atmosféricas y Biogeoquímica. IVIC. Apartado. 20632, Caracas 1020A, Venezuela

82. Nitrous oxide emission factors for sheep and cattle excreta in two subtropical Brazilian grazing systems

Bastos Diego F.[1], Schirmann Janquieli[1], Magiero Emanuelle C.[1], Carvalho Paulo C.F.[2], Bayer Cimelio[1]
[1] *Department of Soil Science and Graduate Program on Soil Science, Faculty of Agronomy, Federal University of Rio Grande do Sul, 91540-000, Porto Alegre, RS, Brazil*
[2] *Grazing Ecology Research Group, Faculty of Agronomy, Federal University of Rio Grande do Sul, 91501-970, Porto Alegre, Brazil*

83. Sustainability of rice cultivation in an important producing area of Cuba under climatic scenarios

Rodriguez Baide Joysee M.[1], van den Berg Maurits[1], Soto Carreño Francisco[2], Maqueira Lopez. Lazaro A.[3], Vázquez Montenegro Ranses J.[4]
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[4]*Centro de Meteorología Agrícola, Instituto de Meteorología, La Habana, Cuba*

L1.4 EUROPE

84. Innovation for Climate Smart Agriculture in Europe

Touzard Jean-Marc
INRA, UMR 0951 "Innovation", 2 place Viala, F-34060 Montpellier Cedex 01, France

85. Nitrogen and water as inputs in farm bio-economic models: creating an operational modeling framework at the EU level

Humblot Pierre, Petsakos Thanasis, Jayet Pierre-Alain
INRA, UMR Economie Publique, Avenue Lucien Bretignières, F-78850 Thiverval Grignon, France

86. « PigChange »: a project to evaluate the consequences of climate change and mitigation options in pig production

Renaudeau David[1], Gourdine Jean Luc[2], Hassouna Melynda[3], Robin Paul[3], Gilbert Hélène[4], Riquet Juliette[4], Dourmad Jean Yves[1]
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[3]*INRA, UMR 1069 SAS, F35000 Rennes, France*
[4]*INRA, UMR 1388 GenPhySE, F31326 Toulouse, France*

87. Assessing the economic GHG abatement potential from the EU-15 dairy sector and underlying uncertainties

Koslowski Frank[1], Eory Vera[1], van den Pol-van Dasselaar Agnes[2], Fofana Abdulai[1], de Haan Michel[2], Lesschen Jan Peter[3], Moran Dominic[1]

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[3]*Alterra, Wageningen UR, P.O. Box 47, 6700AA Wageningen, the Netherlands*

88. Concerted action for climate smart livestock systems: research & innovation priorities in climate changing Europe

Scholte Martin C.Th.[1,2,3]
[1]*Board of Directors Wageningen UR*
[2]*President Animal Task Force*
[3]*Co-chair GRA Livestock Research Group*

89. An observatory of aromatic and medicinal plants as a possible indicator of the climatic changing evolution conditions

Hoxha Valter[1], Ilbert Hélène[2]
[1]*UMR TETIS (Mixed Unit of Territories Research, Environment, Remote Sensing and Spatial Information) - House of Remote Sensing - 500 rue Jean-François Breton 34093 Montpellier Cedex 5, France*
[2]*UMR1110 MOISA (Markets, Organizations, Institutions and Operators Strategies). Campus Montpellier SupAgro / INRA 2 place Pierre Viala 34060 Montpellier Cedex 2, France*

90. The knowledge hub FACCE MACSUR: Modelling agriculture with climate change for food security

Köchy Martin, Banse Martin
Thünen Institute for Market Analysis, Bundesallee 50, 38116 Braunschweig, Germany

91. Can functional complementarity of plant strategies enhance drought resilience in associations of Mediterranean grasses?

Barkaoui Karim[1], Bristiel Pauline[2], Birouste Marine[2], Roumet Catherine[2], Volaire Florence[3]
[1]*CIRAD, UMR SYSTEM, 2 place Pierre Viala, 34060, Montpellier Cedex 2, France*
[2]*CEFE UMR 5175, Université de Montpellier – Université Paul Valéry –19 EPHE, 1919 route de Mende, 34293 Montpellier Cedex 5, France*
[3]*INRA, USC 1338, CEFE UMR 5175, Université de Montpellier – Université Paul Valéry –19 EPHE, 1919 route de Mende, 34293 Montpellier Cedex 5, France*

92. Incremental adaptation in crop management for integrated assessments of climate change impacts in Europe

Webber Heidi[1], Britz Wolfgang[2], Zhou G.[1], de Vries Wim[3], Wolf Joost[4], Ewert Frank[1]
[1]*INRES, University of Bonn, Bonn, Germany*
[2]*ILRI, University of Bonn, Bonn, Germany*
[3]*Alterra, Wageningen University, Wageningen, the Netherlands*
[4]*Plant Production Systems, Wageningen University, Wageningen, the Netherlands*

93. Sensitivity of maize to climate change in Denmark: an analysis using impact response surface approach

Ozturk Isik, Sillebak K. Ib, Olesen E. Jørgen
Department of Agroecology, Aarhus University, Blichers Alle 20 DK-8830, Tjele, Denmark

94. Is it possible to reduce greenhouse gas emissions without reducing production? An assessment of 26 technical options

Pellerin Sylvain[1], Bamière Laure[2], Angers Denis[3], Béline Fabrice[4], Benoît Marc[5], Butault Jean-Pierre[6], Chenu Claire[7], Colnenne-David Caroline[8], De Cara Stéphane[2], Delame Nathalie[2], Doreau Michel[5], Dupraz Pierre[9], Faverdin Philippe[10], Garcia-Launay Florence[10], Hassouna Melynda[11], Hénault Catherine[12], Jeuffroy Marie-Hélène[8], Klumpp Katja[13], Metay Aurélie[14], Moran Dominic[15], Recous Sylvie[16], Samson Elisabeth[11], Savini Isabelle[17], Pardon Lénaic[17]
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[2]*INRA, UMR Eco-Pub, 78850 Thiverval-Grignon, France*
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[5]*INRA, UMR Herbivores, 63122 Saint-Genes-Champanelle, France*
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[9]*INRA, UMR SMART, 35011 Rennes, France*
[10]*INRA, UMR PEGASE, 35590 Saint Gilles, France*
[11]*INRA, UMR SAS, 35042 Rennes, France*
[12]*INRA, UR USS, 45075 Orléans, France*
[13]*INRA, UR Ecosytème Prairial, 63039 Clermont-Ferrand, France*
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[15]*SRUC, Land Economy and Environment Research, EH9 3JG, Edinburgh, United Kingdom*
[16]*INRA, UMR FARE, 51686 Reims, France*
[17]*INRA, DEPE, 75338 Paris, France*

95. Agroforestry for a climate-smart agriculture – a case study in France

Cardinael Rémi[1,4], Chevallier Tiphaine[1], Germon Amandine[3], Jourdan Christophe[2], Dupraz Christian[3], Barthès Bernard[1], Bernoux Martial[1], Chenu Claire[4]
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[3]*INRA, Umr System, 34060 Montpellier, France*
[4]*AgroParisTech, IEES, 78850 Thiverval-Grignon, France*

96. Impacts of climate and socio-economic change at farm and landscape level in the Netherlands: climate smart agriculture?

Reidsma Pytrik[1], Bakker Martha M.[2], Kanellopoulos Argyris[1,3], Alam Shah J. [4], Paas Wim[1,5], Kros Johannes[6], de Vries Wim[6,7]
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[7]*Environmental Systems Analysis Group, Wageningen University, P.O. Box 47, 6700 AA Wageningen, the Netherlands*

97. Sustainability of agriculture: can climate change adaptations attract youth into agriculture?

Betigül Onay Özman
YADA Foundation (Yaşama Dair Vakıf), Turkey

L1.5 NORTH AMERICA

98. A research program to address agricultural stakeholders' concerns regarding the evolution of crop pests associated with climate change

Blondlot Anne[1], Gagnon Annie-Ève[2], Bourgeois Gaétan[3], Brodeur Jacques[4], Mimee Benjamin[3] and colleagues
[1]*Ouranos, Montreal, Quebec, Canada*
[2]*Centre de recherche sur les grains (CÉROM), Saint-Mathieu-de-Beloeil, Quebec, Canada*
[3]*Agriculture and Agri-Food Canada, Saint-Jean-sur-Richelieu, Quebec, Canada*
[4]*Institut de recherche en biologie végétale, Université de Montréal, Montreal, Quebec, Canada*

99. Bioenergy crop impacts on soil carbon sequestration, soil biophysical properties and N_2O emissions in Manhattan, Kansas

McGowan Andrew[1], Yishak Elias[2], Rice Charles[1]
[1]*Department of Agronomy: Kansas State University, 66506, Manhattan, United States*
[2]*Department of Mechanical Engineering: University of Maryland, 20742, College Park, United States*

100. Understanding farm level N_2O emissions in California systems

Decock Charlotte[1], Verhoeven Elizabeth[1], Pereira Engil[1], Garland Gina[1], Kennedy Taryn[2], Suddick Emma[3], Burger Martin[4], Horwath Willam[4], Six Johan[1]
[1]*ETH Zurich, Department of Environmental Systems Science, 8092 Zurich, Switzerland*
[2]*University of California Davis, Department of Plant Sciences, 95616 Davis, California, USA*
[3]*Woods Hole Research Center, 02540-1644 Falmouth, Massachusetts, USA*
[4]*University of California Davis, Department of Land, Air and Water Resources, 95616 Davis, California, USA*

101. A transdisciplinary approach for climate smart management of maize

Wright Morton Lois, Arritt Raymond, the CSCAP Team
Iowa State University, Ames, Iowa 50011, USA

PARALLEL SESSION L2 CLIMATE-SMART STRATEGIES

Tuesday, 17 March 2015

14:00–18:00

ORAL PRESENTATIONS

PARALLEL SESSION L2.1 DEVELOPING AND EVALUATING CLIMATE-SMART PRACTICES

ROOM SULLY 1

KEYNOTE PRESENTATIONS

14:00 Developing and evaluating climate-smart practices and services

Campbell Bruce M.[1], Corner-Dolloff C.[2], Girvetz E.H.[3], Rosenstock T.[4]

[1]*CIAT, c/o University of Copenhagen, Copenhagen, Denmark*

[2]*CIAT, Cali, Colombia*

[3]*CIAT, Nairobi, Kenya*

[4]*ICRAF, Nairobi, Kenya*

14:30 Evaluating agricultural mitigation and scaling up climate-smart practices using the FAO EX-Ante Carbon balance Tool

Bernoux Martial[1], Bockel Louis[2], Grewer Uwe[2], François Jean-Luc[3], Rossin Nicolas[4], Braimoh Ademola[5]

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[5]*World Bank, Washington DC, USA*

CONTRIBUTED ORAL PRESENTATIONS

16:30 Rain water-based integrated agricultural system: a model for ensuring food security and adaptation in coastal Bangladesh

Talukder Byomkesh[1], Blay-Palmer Alison[1], van Loon Gary[2]

[1]*Department of Geography and Environmental Studies, Wilfrid Laurier University, Waterloo, Canada*

[2]*School of Environmental Studies, Queen's University, Kingston, Canada*

16:45 Additive impacts of climate-smart agriculture practices in mixed crop-livestock systems in Burkina Faso

Rigolot Cyrille[1,2], De Voil P.[3], Douxchamps Sabine[4], Prestwidge Di[1], Van Wijk Mark[5], Thornton Phillip[6], Henderson B.[1], Medina Hidalgo D.[1], Rodriguez Daniel[3], Herrero Mario[1]

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[2]*INRA, UMR 1273 Metafort, F-63122 Saint Genes Champanelle, France*

[3]*University of Queensland, Queensland Alliance for Agriculture and Food Innovation (QAAFI), Toowoomba, Australia*

[4]*International Livestock Research Institute (ILRI), Ouagadougou, Burkina Faso*

[5]*International Livestock Research Institute (ILRI), PO Box 30709-00100, Nairobi, Kenya*

[6]*CGIAR Research Programme on Climate Change, Agriculture and Food Security, (CCAFS), PO Box 30709-00100, Nairobi, Kenya*

17:00 Developing indicators for Climate-Smart Agriculture (CSA)

Rawlins Maurice Andres, Heumesser Christine, Emenanjo Ijeoma, Zhao Yuxuan, Braimoh Ademola

The World Bank Group, 1818 H St. NW, Washington DC, USA

17:15 Towards metrics to track and assess climate smart agriculture

Verhagen Jan, Huib Hengsdijk, Sjaak Conijn, Annemarie Groot, Nico Polman, Theun Vellinga, Eddy Moors

Wageningen UR, droevendaalsesteeg 4, 6708 pb, Wageningen, the Netherlands

PARALLEL SESSION L2.2 FACING CLIMATIC VARIABILITY AND EXTREMES

ROOM SULLY 2

KEYNOTE PRESENTATIONS

14:00 Facing climatic variability and extremes

Zougmoré Robert[1], Rao K.P.C.[2], Diedhiou Arona[3]
[1]ICRISAT-Mali, BP 320 Bamako Mali
[2]ICRISAT Ethiopia, PO Box 5689, Addis Ababa, Ethiopia
[3]Université de Grenoble, BP 53, 38041, Grenoble Cedex 9, France

14:30 Rainfall modifications in the context of climate change: the puzzle of the tropical regions

Lebel Thierry, Vischel Théo
LTHE, IRD & Université de Grenoble, BP 53, 38041, Grenoble Cedex 9, France

CONTRIBUTED ORAL PRESENTATIONS

16:30 The potential for underutilised crops to improve food security in the face of climate change

Massawe Festo[1], Mayes Sean[1,2], Cheng A.[1], Chai, H.H.[1], Cleasby P.[1], Symonds R.[1]; Ho W.K.[2], Siise Aliyu[1], Wong Q.[1], Kendabie P.[3], Yanusa Y.[4], Azman R.[2], Azam-Ali Sayed N.[2]
[1]University of Nottingham Malaysia Campus, Malaysia
[2]Crops for the Future, Malaysia
[3]University of Nottingham, United Kingdom
[4]Bayero University Kano, Nigeria

16:45 Changes in climate variability and potential for impacts of droughts on agricultural markets

Leclère David, Havlík Petr
International Institute for Applied System Analysis (IIASA), Ecosystem Services Management program (ESM), Laxenburg, Austria

17:00 How precisely do maize crop models simulate the impact of climate change variables on yields and water use?

Durand Jean-Louis[1], Bassu Simona[2], Brisson Nadine[2], Boote Kenneth[3], Lizaso Jon[4], Jones James W.[5], Rosenzweig Cynthia[6], Ruane Alex C.[6], Adam Myriam[7], Baron Christian[8], Basso Bruno[9,10], Biernath Christian[11], Boogaard Hendrik[12], Conijn Sjaak[13], Corbeels Marc[14], Deryng Delphine[15], de Sanctis Giacomo[16], Gayler Sebastian[17], Grassini Patricio[18], Hatfield Jerry[19], Hoek Steven[12], Izaurralde Cesar[20], Jongschaap Raymond R .[13], Kemanian Armen R.[21], Kersebaum K. Christian[22], Kim Soo-Hyung[23], Kumar Naresh S.[24], Makowski David[2], Müller Christoph[25], Nendel Claas[22], Priesack Eckart[11], Pravia Maria Virginia[21], Sau Federico[4], Shcherbak Iurii[9,10], Tao Fulu[26], Teixeira Edmar[27], Timlin Dennis[28], Waha Katharina[24]
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[11]Institute für Bodenökologie, Helmholtz Zentrum München, Ingolstädter Landstraße 1, D-85764, Neuherberg, Germany
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[13]WUR-Plant Research International, Wageningen University and Research Centre, P.O. Box 16, 6700AA, Wageningen, the Netherlands
[14]CIRAD-Annual Cropping Systems, C/O Embrapa-Cerrados Km 18, BR 020 - Rodovia Brasılia/Fortaleza, CP 08223, CEP 73310-970, Planaltina, DF, Brazil
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[19]*USDA-ARS National Soil Tilth Laboratory for Agriculture and the Environment, 2110 University Boulevard, Ames, IA 50011, USA*
[20]*Pacific Northwest National Laboratory and University of Maryland, 5825 University Research Court Suite 3500, College Park, MD 20740, USA*
[21]*Department of Plant Science, The Pennsylvania State University, 247 Agricultural Sciences and Industries Building, University Park, PA 16802, USA*
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[26]*Institute of Geographical Sciences and Natural Resources Research, Chinese Academy of Sciences, Beijing, 100101, China*
[27]*Sustainable Production, The New Zealand Institut for Plant & Food Research Limited, Lincoln, Canterbury, New Zealand*
[28]*Crop Systems and Global Change Laboratory, USDA/ARS, 10300 Baltimore avenue, BLDG 001 BARC-WEST, Beltsville, 20705-2350 MD, USA*

17:15 Modeling livestock production under climate constraint in the African drylands to identify interventions for adaptation

Mottet Anne[1], Conchedda Giulia[1], de Haan Cees[2], Msangi S.[3], Ham Frédéric[4], Lesnoff Matthieu[5], Fillol, Erwann[4], Ickovicz Alexandre[6], Cervigni Raffaello[2], Gerber Pierre[1]
[1]*FAO, 1Viale delle Terme di Caracalla 00153 Rome, Italy*
[2]*World Bank, 1818 H St NW, Washington, DC 20433, USA*
[3]*IFPRI, 2033 K Street, NW, Washington, DC 20006, USA*
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[5]*CIRAD, Campus de Baillarguet, TA C-112 / A, 34398 Montpellier Cedex 5, France*
[6]*CIRAD, Campus Montpellier SupAgro-INRA, 2, place P. Viala, 34060 Montpellier cedex 1, France*

PARALLEL SESSION L2.3 COMBINING MITIGATION, ADAPTATION AND SUSTAINABLE INTENSIFICATION

ROOM SULLY 3

KEYNOTE PRESENTATIONS

14:00 Ex-ante evaluation of Climate-Smart Agriculture options

Cassman Kenneth[1], van Ittersum M. K.[2], Hochman Z.[3], McIntosh P.[3], Grassini P.[1], Yang H.[1], van Bussel L.G.J.[2], Guilpart N.[1], Van Wart J.[1], Claessens L.[4], Boogaard H.[2], de Groot H.[2], Wolf J.[2], van Oort P.[5]
[1]*Univ. of Nebraska, USA*
[2]*Wageningen University, the Netherlands*
[3]*CSIRO, Australia*
[4]*ICRISAT, Kenya*
[5]*AfricaRice*

14:30 Will sustainable intensification get us to 2 degrees Celsius?

Wollenberg Lini[1], Richards Meryl[1], Havlik Petr[2], Smith Pete[3], Carter Sarah[4], Herold Martin[4]
[1]*CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS), Gund Institute for Ecological Economics, University of Vermont, USA*
[2]*International Institute for Applied Systems Analysis (IIASA), Austria*
[3]*University of Aberdeen, United Kingdom*
[4]*Wageningen University and Research Centre, the Netherlands*

CONTRIBUTED ORAL PRESENTATIONS

16:30 Climate readiness in smallholder agricultural systems: Lessons learned from REDD+

Zurek Monika, Streck Charlotte, Roe Stephanie, Haupt Franziska with contributions from Wollenberg Lini and de Pinto Alex
Climate Focus, Sarphatikade 13, 1017 WV Amsterdam, the Netherlands

16:45 Assessing low emissions agricultural pathways under alternative climate policy regimes

Kleinwechter Ulrich[1], Havlik Petr[1], Levesque Antoine[1], Forsell Nicklas[1], Zhang Yuquan W.[1], Fricko Oliver[2], Riahi Keywan[2], Obersteiner Michael[1]
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[2]*International Institute for Applied Systems Analysis (IIASA), Energy Program, Schloßplatz 1, 2361 Laxenburg, Austria*

17:00 Climate-smart coffee systems in East Africa

Jassogne Laurence[1], van Asten Piet[1], Laderach Peter[2], Craparo S.[7], Liebig Theresa[2], Rahn Eric[2], Baca Maria[2], Graefe S.[3], Whitbread Anthony[3], Nibasumba Anaclet[4], Ampaire Edidah [1], Kagezi Godfrey[5], Vaast Philippe[6]
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[2]*International Center of Tropical Agriculture (CIAT), Cali, Columbia*
[3]*Goettingen University, Goettingen, Germany*
[4]*Institut des Sciences Agronomiques du Burundi (ISABU), Bujumbura, Burundi*
[5]*National Coffee Research Institute (NaCORI), Mukono, Uganda*
[6]*World Agroforestry Centre (ICRAF - CIRAD), Nairobi, Kenya*
[7]*University of Witwatersrand (WITS), South Africa*

17:15 Prioritizing climate-smart agricultural interventions at multiple spatial and temporal scales

Shirsath Paresh B.[1], Dunnett Alex[2], Aggarwal Pramod K.[3], Ghosh J.[4], Joshi Pramod K.[4], Thornton Phillip[5], Pal B.[6]
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[2]*CCAFS, IWMI-New Delhi, India*
[3]*CCAFS-South Asia, IWMI-New Delhi, India*
[4]*IFPRI, New Delhi, India*
[5]*Theme Leader – Data and Tools, CCAFS*
[6]*ISEC, Bengaluru, India*

PARALLEL SESSION L2.4 BREEDING AND PROTECTING CROPS AND LIVESTOCK

ROOM RONDELET

KEYNOTE PRESENTATIONS

14:00 Plant breeding for climate-smart agriculture

Glaszmann Jean Christophe
UMR Amélioration Génétique et Adaptation des Plantes (Agap-DDSE), CIRAD, France

14:30 What impact of climate change on animal health?

Lancelot Renaud, Guis Hélène, Lefrançois Thierry
Cirad, INRA, UMR CMAEE, France

CONTRIBUTED ORAL PRESENTATIONS

16:30 Reducing nitrogen run-off and emission, and increasing rice productivity in African rice production environment

van Boxtel Jos[1], Selvaraj Michael[2], Dartey Kofi[3], Lamo Jimmy[4], Asante Maxwell[3], Lu Zhongjin[1], Ishitani Manabu[2], Addae Prince[5], Sanni Kayode[5]
[1]*Arcadia Biosciences, Davis CA 95618, USA*
[2]*CIAT, AA6713 Cali, Colombia*
[3]*CSIR- CRI, PO Box 3785, Kumasi, Ghana*
[4]*NARO-NaCRRI, Box 7084, Kampala, Uganda*
[5]*AATF, PO Box 30709, Nairobi, Kenya*

16:45 Utilization of ex situ collections and climate analogues for enhancing adaptive capacity to climate change

Archak Sunil[1], Semwal D.P.[1], Pandey Sushil[1], Mittra Sarika[2], Mathur P.N.[2], Agarwal Pramod[3], Bansal K.C.[1]
[1]*ICAR-National Bureau of Plant Genetic Resources, Pusa Campus, New Delhi 110 012, India*

[2]*Bioversity International, Pusa Campus, New Delhi 110 012, India*
[3]*IWMI, Pusa Campus, New Delhi 110 012, India*

17:00 Adaptation of Mediterranean bovine livestock to climate constraints. Genetic diversity and breeding systems

Flori Laurence[1,2], Moazami-Goudarzi Katayoun[1], Lecomte Philippe[3], Moulin Charles-Henri[3,4], Thévenon Sophie[2], Alary Véronique[3], Casabianca François[5], Lauvie Anne[5], Boushaba Nadjet[6], Saïdi-Mehtar Nadhira[6], Boujenane Ismail[7], Araba Abdelillah[7], Menni Dalal[7], Pineau Olivier[8], Ciampolini Roberta[9], Casu Sara[10], ElBeltagy Ahmed[11], Osman Mona-Abdelzaher[11], Rodellar Clemen[12], Martinez Amparo[13], Delgado Juan-Vicente[13], Landi Vincenzo[13], Hadjipavlou Georgia[14], Ligda Christina[15], Gautier Mathieu[16], Laloë Denis[1]
[1]*INRA/AgroParisTech, GABI, 78352 Jouy-en-Josas, France*
[2]*Cirad, INTERTRYP, 34000 Montpellier, France*
[3]*Cirad, SELMET, 34000 Montpellier, France*
[4]*Montpellier SupAgro, SELMET, 34000 Montpellier, France*
[5]*INRA, LRDE, 20250 Corte, France*
[6]*Université des Sciences et de la Technologie d'Oran, Département de Génétique Moléculaire Appliquée, 31000 Oran, Algeria*
[7]*Institut Agronomique et Vétérinaire Hassan II, Département de Productions et de Biotechnologies Animales, 10101 Rabat, Morocco*
[8]*La Tour du Valat, 13104 Arles, France*
[9]*Dipartimenta di Scienze Veterinarie, LBG, 56124 Pisa, Italy*
[10]*Agris Sardegna, Settore Genetica e Biotecnologie, 07100 Sassari, Italy*
[11]*APRI, Animal Breeding and Genetics, Cairo, Egypt*
[12]*Facultad de Veterinaria, Lagenbio, 50013 Zaragoza, Spain*
[13]*Animal Breeding Consulting SL, Laboratorio de Genetica Molecular Aplicada, 14071 Cordoba, Spain*
[14]*Agricultural Research Institute, 1010 Lefkosia, Cyprus*
[15]*Veterinary Resarch Institute, NAGREF, 57001 Thessaloniki, Greece*
[16]*INRA/IRD/Cirad/Montpellier SupAgro, CBGP, 34988 Montferrier-sur-Lez, France*

17:15 Towards genotypes adapted to climate change via combination of phenotyping and modelling: The projects DROPS and Phenome

Tardieu François
INRA, LEPSE, 34060 Montpellier, France

PARALLEL SESSION L2.5 OVERCOMING BARRIERS: POLICIES AND INSTITUTIONAL ARRANGEMENTS TO SUPPORT CSA

ROOM BARTHEZ

KEYNOTE PRESENTATIONS

14:00 Overcoming barriers: policies and institutional arrangements to support CSA

Lipper Leslie
FAO Rome, Via delle Terme di Caracalla, Rome, Italy

14:30 Policies and institutions conducive for enhancing the transfer to CSA in Africa

Sedogo Laurent[1], Lamers John[2], William Fonta[3]
[1]*Executive Director WASCAL Accra, Ghana*
[2]*Coordinator of the Core Research Program of WASCAL, ZEF- University of Bonn, Germany*
[3]*Research Coordinator, WASCAL Competence Center Ouagadougou, Burkina Faso*

CONTRIBUTED ORAL PRESENTATIONS

16:30 Schools as climate smart agriculture information hubs

Manalo Jaime IV A., Layaoen Myriam G., Balmeo Katherine P., Berto Jayson C., Frediles Christina A., Saludez Fredierick M.
Development Communication Division, Philippine Rice Research Institute, Maligaya, Science City of Munoz, Nueva Ecija 3119, Philippines

16:45 Advancing CSA solutions through global collaboration: the Global Research Alliance on Agricultural Greenhouse Gases

Clark Harry[1], Scholten Martin[2]
[1]*NZAGRC, Tennent Drive, Private Bag 11008, Palmerston North 4442, New Zealand*
[2]*Wageningen UR, Droevendaalsesteeg 4, 6708 PB Wageningen, the Netherlands*

17:00 Using whole-farm models for policy analysis of climate smart agriculture

Paolantonio Adriana[1], Branca Giacomo[1], Arslan Aslihan[1], Cavatassi Romina[1], Cacho Oscar[2]
[1]*Agricultural Development Economics Division, Food and Agriculture Organization of the UN, Viale delle Terme di Caracalla, Rome 00153, Italy*
[2]*University of New England, Armidale NSW 2350, Australia*

17:15 Climate shocks and risk attitudes among female and male maize farmers in Kenya

Wainaina Priscilla[1], Tongruksawattana Songporne[2], De Groote Hugo[2], Gunaratna Nilupa[3]
[1]*Department of Agricultural Economics and Rural Development; Georg-August-University of Goettingen, Germany*
[2]*International Maize and Wheat Improvement Center (CIMMYT), Nairobi, Kenya*
[3]*Department of Global Health and Population, Harvard School of Public Health, Massachusetts, USA*

POSTER SESSION 2

Tuesday, 17 March 2015

15:00 – 16:30

EXHIBITION HALL, LEVEL 0

L2.1 DEVELOPING AND EVALUATING CLIMATE SMART PRACTICES

1. Climate Smart Management Options for Improving the Soil Fertility and Farm Productivity in the Middle Hills of Nepal

Shrestha Shiva Kumlar, Shrestha A., Bishwakarma B. K., Allen R.
Sustainable Soil Management Programme (SSMP), HELVETAS Swiss Intercooperation Nepal, GPO Box 688, Kathmandu, Nepal

2. Linking an ecological based system and social resilience to build Climate Smart village model in Niger

Tougiani Abasse[1], Adamou Basso[1], Boureima Moussa[1], Jules Bayala[2] and Robert Zougmore[3]
[1]*Institut National de Recherche Agronomique du Niger, BP429, Niamey, Niger*
[2]*World Agroforestry research Centre, Sahel Node, Samanko, BP: E5118, Bamako, Mali*
[3]*Programme CCAFS Afrique de l'Ouest, ICRISAT PO Box 320 Bamako, Mali*

3. Agriculture, climatic risks and food security in disaster-prone coastal landscape of Bangladesh

Ronju Ahammad
Charles Darwin University, Australia

4. Assessing economic benefits of the use of climate seasonal forecasts within cowpea and sesame sectors in Burkina Faso

Ouédraogo Mathieu[1], Barry Silamana[2], Kagambega Levy[2], Somé Léopold[2], Zougmoré Robert[1]
[1]*The CGIAR Research Program on Climate Change, Agriculture and Food Security, West Africa Region, ICRISAT, BP 320, Bamako, Mali*

[2]*Institut de l'Environnement et de Recherches Agricoles (INERA), 04 BP 8645 Ouagadougou 04, Burkina Faso*

5. Measurement of climate change and its effect: comparison between an objective method and population perceptions

Azeufouet Alain Simplice[1], Fofiri Nzossie Eric Joël[2], Bring Christophe[2]
[1]*Ministère de l'Agriculture et du développement rural / DESA, BP. 294 issea Yaoundé, Cameroon*
[2]*Département de géographie, Université de Ngaoundéré BP 454, Cameroon*

6. A set of indicators to evaluate policies for climate smart agriculture

Bonati Guido, Altobelli Filiberto
Istituto Nazionale di Economia Agraria, Via Nomentana 41, 00161 Roma, Italy

7. Developing and evaluating CSA practices at country level: lessons learned from Malawi

Phiri George[1], Lipper Leslie[2], Asfaw Solomon[3], Cattaneo Andrea[4], Cavatassi Romina[5], Paolantino Adriana[3], McCarthy Nancy[6], Spairani Alessandro[7], Branca Giacomo[8], Grewer Uwe[9], Mann Wendy[10]
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[2]*Senior Environmental Economist, FAO Rome, Viale delle Terme di Caracalla, Rome, Italy*
[3]*Economist, FAO Rome, Italy*
[4]*CSA Project Leader, FAO Rome, Italy*
[5]*CSA Project Coordinator, FAO Rome, Italy*
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[7]*CSA project officer, FAO Rome, Italy*
[8]*University of Tuscia, Viterbo, Italy*
[9]*Agricultural Mitigation Consultant, FAO Rome, Italy*
[10]*Senior Policy Consultant, FAO Rome, Italy*

8. Developing and evaluating CSA practices at country level: lessons learned from the Zambian experience

Kokwe Misael[1], Lipper Leslie[2], Arslan Aslihan[3], Cattaneo Andrea[4], McCarthy Nancy[5], Spairani Alessandro[6], Branca Giacomo[7], Grewer Uwe[8], Mann Wendy[9]
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[5]*LEAD Analytics, Washington DC, USA*
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[7]*University of Tuscia, Viterbo, Italy*
[8]*Agricultural Mitigation Consultant, FAO Rome, Italy*
[9]*Senior Policy Consultant, FAO Rome, Italy*

9. Millet and sorghum leaf pruning and transplantation as adaptation techniques to rainfall variability in the Sahel

Alhassane A., Traore S.B., Sarr B., Lawali M. N., Seybou O. A. B, Chaibou B.
Centre Régional AGRHYMET, PO Box 11011, Niamey, Niger

10. CSA menus of practices in the MICCA pilots

Rioux Janie, Rosenstock Todd, Kirui Josephine, Mpanda Mathew, Massoro Erasto, Karttunen Kaisa
Food and Agriculture Organization of the UN, Viale delle Terme di Caracalla, Rome 0015, Italy

11. Sustainability of broiler production in the context of climate change – Evaluation of new incubation strategies

Nyuiadzi Dzidzo[1,10], Méda Bertrand[1], Travel Angélique[2], Berri Cécile[1], Bignon Laure[2], Leterrier Christine[3,4,5,6], Guilloteau Laurence[7], Coustham Vincent[1], Dusart Léonie[2], Mercerand Frédéric[8], Delaveau Joël[8], Grasteau Sandrine[1], Tona Kokou[9], Bouvarel Isabelle[2], Collin Anne[1]
[1]*INRA, UR83 Recherches Avicoles, F-37380, Nouzilly, France*
[2]*Institut Technique de l'Aviculture, F-37380, Nouzilly, France*
[3]*INRA, UMR85 Physiologie de la Reproduction et des Comportements, F-3738, Nouzilly, France*
[4]*CNRS, UMR7247, F-37380, Nouzilly, France*
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[6]*IFCE, F-37380, Nouzilly, France*
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[9]*Centre d'Excellence Régionale sur les Sciences Aviaires (CERSA), University of Lome, B.P. 1515, Lomé, Togo*
[10]*Institut Togolais de Recherche Agronomique (ITRA), BP 1163, Lomé, Togo*

12. An analytical framework for Climate-Smart Agriculture at the community level

Chandra Alvin, McNamara Karen, Dargusch Paul
School of Geography Planning and Environmental Management, University of Queensland, St Lucia Campus, Brisbane, QLD 4072, Australia

13. Are cropping practices developed by Sub-Saharan farmers climate-smart? Case study of millet cropping system in Senegal

Tall Laure[1], Mbengue Medoune[2], Ndour B. Yacine[1], Masse Dominique[2], Clermont-Dauphin Cathy[3]
[1]Institut Sénégalais de Recherches Agricoles (ISRA), Laboratoire National sur les productions végétales (LNRPV), Dakar, Senegal
[2]Institut de Recherche pour le Développement (IRD), LMI IESOL, Dakar, Senegal
[3]Institut de Recherche pour le Développement (IRD), UMR Eco&Sol, Montpellier, France

14. Namibia specific climate smart agricultural land use practices: a budding vehicle for improving ecosystem services

Kuhn Nikolaus J., Naanda Martha Talamondjila, Bloemertz Lena
Physical Geography and Environmental Change, Department of Environmental Sciences, University of Basel (UNIBAS), Klingelbergstrasse 27, 4056 Basel, Switzerland

15. A two-dimension evaluation of CSA practices. Evaluating practices by indicators and reduce non-observable variable bias

Maldonado Jorge[1], Gómez John[1], Corner-Doloff Caitlin[2], Lizarazo Miguel[2]
[1]Universidad de los Andes, Bogotá, Colombia
[2]International Center for Tropical Agriculture (CIAT), Decision and Policy Analysis, Cali, Colombia

16. Balancing complexity and usability when modelling farm scale production and greenhouse gas emissions

Hutchings Nicholas, Kristensen Ib
Dept of Agroecology, Aarhus University, Blichers Alle 1, 8830 Tjele, Denmark

17. An impact assessment of distinct agricultural climate protection measures for the implementation on 10 000 Swiss farms

Prechsl Ulrich E., Alig Ceesay Martina, Wolff Veronika, Gaillard Gérard
Agroscope, Institute for Sustainability Sciences, Reckenholzstrasse 191, CH-8046 Zurich, Switzerland

18. How biodiversity-agriculture integration meets environmental expectations in a changing climate: a gender perspective

Chitakira Munyaradzi
Department of Environmental Sciences, University of South Africa, Johannesburg 1710, South Africa

19. Analysing constraints to the improvement of cattle productivity via trypanosomosis treatment in West Africa

MacLeod Michael[1], Eory Vera[1], Wint G.R.W.[2], Shaw Alexandra P.M.[3], Gerber Pierre[4], Cecchi Giuliano[5], Mattioli Raffaele C.[4], Robinson Tim P.[6]
[1]Land Economy, Environment and Society Group, SRUC, Edinburgh, EH9 3JG, United Kingdom
[2]Environmental Research Group Oxford (ERGO), Department of Zoology, South Parks Road, Oxford, OX1 3PS, United Kingdom
[3]AP Consultants, 22 Walworth Enterprise Centre, Duke Close, Andover, SP10 5AP, United Kingdom
[4]Food and Agriculture Organization of the United Nations (FAO), Animal Production and Health Division. VialedelleTerme di Caracalla, 00153 Rome, Italy
[5]Food and Agriculture Organization of the United Nations, Sub-regional Office for Eastern Africa, CMC Road, P.O. Box 5536, Addis Ababa, Ethiopia
[6]Livestock Systems and Environment (LSE), International Livestock Research Institute (ILRI), P.O. Box 30709, 00100 Nairobi, Kenya

20. Emission of N_2O from soil received saline and sodic water: effects of compost and gypsum applications

Dheri Gurmeet Singh[1], Lal Rattan[2]
[1]Department of Soil Science, Punjab Agricultural University, Ludhiana-141004, India
[2]Carbon Management and sequestration Center, The Ohio State University, Columbus, USA

21. Climate-Smart Agriculture livelihood options for displaced population on Yap Island

Krishnapillai Murukesan V.
Cooperative Research and Extension, College of Micronesia-FSM, Yap Campus, Colonia, Yap, FM 96943, Federated States of Micronesia

22. Evaluating the cost-effectiveness of development investments

Luedeling Eike[1], De Leeuw Jan[2], Rosenstock Todd S.[2] Lamanna Christine[2], Shepherd Keith[2]

[1]*World Agroforestry Centre and Center for Development Research (ZEF), University of Bonn, Walter-Flex-Str. 3, 53113 Bonn, Germany*
[2]*World Agroforestry Centre, PO Box 30677, 00100, Nairobi, Kenya*

23. MAPA project: resilient agro-climatic adaptation models for livestock production systems in Boyacá, Colombia

López-Cepeda Michael, Bolaños-Benavides Martha, García-Gómez Gustavo
CORPOICA (Colombian Corporation of Agricultural Research), Tibaitatá Investigation Center. Postcode: P.O. Box 344300. Bogotá, Colombia

24. Assessing the determinants of adaptation strategies at farm level: the case of wine growers in South-East France

Graveline Nina, Grémont Marine
BRGM, 1039, avenue de Pinville. 34000 Montpellier, France

25. Determinants of adoption of climate smart agriculture in coastal Bangladesh

Saroar Md Mustafa
Urban and Rural Planning Discipline, Khulna University, Khulna 9208, Bangladesh

26. Evolution of soil functional diversity after changes in management practices and effects on N_2O emissions

Recous Sylvie[1], Léonard Joël[2], Alavoine Gonzague[1], Amossé Joël[2,3], Bertrand Michel[3], Boizard Hubert[2], Brunet Nicolas[2], Chauvat Matthieu[4], Cheviron Nathalie[5],Cluzeau Daniel[6], Coudrain Valérie[1,5], Dequiet Samuel[7], Duparque Annie[8], Duval Jérôme[2], Hedde Mickaël[5], Maron Pierre-Alain[7], Peyrard Céline[2], Philippot Laurent[7], Mary Bruno[2]
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[5]*INRA, UR PESSAC, Versailles, France*
[6]*Université de Rennes, UMR CNRS Ecobio, Rennes, France*
[7]*INRA, UMR AGROECOLOGIE, Dijon, France*
[8]*AgroTranfert Ressources et Territoires, Estrées-Mons, France*

27. Opportunities and challenges in China's irrigation water–energy nexus

Cremades Roger[1], Rothausen Sabrina G.S.A.[2], Conway Declan[3], Wang Jinxia[4], Zou Xiaoxia[5], Li Yu'e[5]
[1]*International Max Planck Research School on Earth System Modeling (IMPRS-ESM), Hamburg, Germany, and; Research Unit, Sustainability and Global Change, University of Hamburg, Germany*
[2]*Department of Geography, University of Copenhagen, Copenhagen, Denmark*
[3]*Grantham Research Institute on Climate Change and the Environment, London School of Economics and Political Science, London, United Kingdom*
[4]*Center for Chinese Agricultural Policy, Institute of Geographic Sciences and Natural Resources Research, Chinese Academy of Sciences, Beijing, 100101, P.R. China*
[5]*Institute of Environment and Sustainable Development in Agriculture, Chinese Academy of Agricultural Sciences, 100081 Beijing, P.R. China*

28. A climate smart strategy to reduce risks and increase resilience of agricultural production systems in Colombia

Ayarza Miguel Angel, Rojas Edwin, Aguilera Elizabeth, Bolaños Martha, Arce Blanca, Rodríguez Gonzalo, Martínez Juan Carlos, Bautista Luis
Corporacion Colombiana de Investigacion Agropecuaria, Corpoica, Km 14, via Bogota-Mosquera, Bogota, Colombia

29. Interpretation of GHG emissions from mixed crop, grassland and ruminant systems using the FarmSim model

Carozzi Marco[1], Martin Raphaël[2], Klumpp Katja[2], Borras David[2], Eza Ulrich[2], Rumpel Cornelia[3], Créme Alexandra[3], Le Roux Xavier[4], Poly Frank[4], Chabbi Abad[3], Massad Raia Silvia[1]
[1]*INRA, AgroParisTech, UMR 1091 Environnement et Grandes Cultures, 78850 Thiverval- Grignon, France*
[2]*INRA, UR 0874 UREP Unité de Recherche sur l'Ecosystème Prairial, 63100 Clermont-Ferrand, France*
[3]*BIOEMCO, UMR 7618, CNRS-INRA-ENS-Paris 6, bât EGER, 78850 Thiverval-Grignon, France*
[4]*Université de Lyon, INRA, CNRS, Université Lyon 1, Microbial Ecology Centre (UMR 5557 CNRS, USC 1364 INRA), Villeurbanne, France*

30. DAYCENT parameterization and uncertainty assessment for modelling Swiss crops

Necpalova Magdalena, Lee Juhwan, Six Johan
ETH-Zurich, Sustainable Agroecosystems, Tannenstrasse 1, 8092 Zurich, Switzerland

31. The yield response of intercrop system to rainfall changes on the southern slopes of Mt. Kenya in Embu

Kanampiu Fred[1], Njeru M.James[1], Kitonyo Onesmus[2], Micheni Alfred[3]
[1]*International Maize and Wheat Improvement Centre, P.O. Box 1041-00621, Nairobi, Kenya*
[2]*The University of Adelaide, Adelaide SA 5005, Australia*
[3]*Kenya Agricultural Research Institute, P.O. Box 27-60100, Embu, Kenya*

32. Rain water harvest technology as a tool for climate smart agriculture for small holder farmer in Bangladesh

Abdullah Hasan Muhammad, Ahamed Tofayel, Miah Md Gisahuddin, Rahman Mezanur
Department of Agroforestry and Environment, Bangabandhu Sheikh Mujibur Rahman Agricultural University, Gazipur-1706, Bangladesh

33. Greenhouse gases emission efficiency of alternative tillage practices in wheat farming systems of Bangladesh

Aravindakshan Sreejith[1], Tittonell Pablo[1], Krupnik T.J.[2], Scholberg J.M.S.[1], Groot J.C.J.[1], Rossi Frederick[2]
[1]*Farming Systems Ecology Group, Wageningen University, 6708PB, Wageningen, the Netherlands*
[2]*International Maize and Wheat Improvement Center (CIMMYT), Bangladesh Country Office, Dhaka, 1212, Bangladesh*

34. Enabling synergies between development, climate change and conservation through land use practices portfolio approach

Duguma Lalisa A., Minang Peter A.
World Agroforestry Centre, P.O .Box 30677 -00100 Un Avenue Gigiri, Nairobi, Kenya

35. Coffee agroforestry systems in Peru – a double dividend for biodiversity and small scale farmers?

Jezeer Rosalien E.[1], Verweij Pita A.[1], Boot Rene G.A.[2]
[1]*Utrecht University, Copernicus Institute of Sustainable Development, Section of Energy and Resources, 3584 CS, Utrecht, the Netherlands*
[2]*Tropenbos International, 6701 AN Wageningen, and Utrecht University, department of Biology, Section of Ecology & Biodiversity, 3584 CH Utrecht, the Netherlands*

36. Soil carbon input by below- and above-ground biomass in rainfed cropping systems in the highlands, Madagascar

Laingo Irintsoa Rasolofo[1], Naudin Krishna[2], Botoela Odom[1], Razafimbelo Tantely[3]
[1]*FOFIFA Ampandrianomby, BP 1690 Antananarivo 101, Madagascar*
[2]*UPR AIDA, CIRAD, F-34398 Montpellier, France*
[3]*Laboratoire des Radio-Isotopes (LRI), Université d'Antananarivo, BP3383, Antananarivo 101, Madagascar*

37. Climate Smart livestock development in natural and improved savannas of an extensive ranch in central Africa (RDC)

Lecomte Phillipe[1], Duclos A.[1,2], Juanes Xaveir[1], Ndao Séga[3], De Crem Ph.[4], Vigne Mathieu[1], Blanfort Vincent[1]
[1]*CIRAD, UMR Selmet, Montpellier, France*
[2]*UMRH Clermont, France*
[3]*ISRA, CRZ Kolda, Senegal*
[4]*Orgaman-JVL, Kinshasa, RD Congo*

38. Targeting CSA in Southern Tanzania under multiple uncertainties

Lamanna Christine[1], Rosenstock Todd S.[1,2], Luedeling Eike[3]
[1]*World Agroforestry Centre (ICRAF), Nairobi, Kenya*
[2]*CGIAR Research Program on Climate Change, Agriculture, and Food Security (CCAFS), Nairobi, Kenya*
[3]*World Agroforestry Centre (ICRAF), Bonn, Germany*

39. Opportunities and limitations of emissions intensity as a metric for climate change mitigation from the livestock sector

Schulte Rogier P.O.[1], Reisinger Andy[2], Clark Harry[2], Donnellan Trevor[1], Lanigan Gary[1]
[1]*Teagasc, Wexford, Co. Wexford, Ireland*
[2]*New Zealand Agricultural Greenhouse Gas Research Centre, Palmerston North 4442, New Zealand*

40. Climate smart agriculture from field to farm scale: a model based approach for Southern Africa

Berre David[1], Mutenje Munyaradzi J.[1], Corbeels Marc[2], Rusinamhodzi Leonard[3], Thierfelder Christian[1], Lopez Ridaura Santiago[4]

[1]*CIMMYT-Zimbabwe. CIMMYT Regional Office, 12.5 Km Peg Mazowe Road, P.O. Box MP163, Mt Pleasant, Harare, Zimbabwe*
[2]*CIRAD - Agroecology and Sustainable Intensification of Annual Crops (AIDA)C/O Embrapa-Cerrados, Km 18, BR 020 – Rodovia, Brasília/Fortaleza, CP 08223 CEP 73310-970, Planaltina, DF, Brazil*
[3]*CIRAD- Agroecology and Sustainable Intensification of Annual Crops (AIDA)- c/o CIMMYT Regional Office, 12.5 Km Peg Mazowe Road, P.O. Box MP163, Mt Pleasant, Harare, Zimbabwe*
[4]*CIMMYT-CCAFS, Texcoco, Mexico*

41. Mainstreaming climate smart agriculture practices through climate smart villages: scalable evidences from South Asia

Jat M.L.[1], Ridaura S.L.[2], Stirling C.M.[3], Aryal J.P.[1], Jat R.K.[4], Sidhu H.S.[5], Mittal S.[1], Sapkota T.B.[1], Sikka A.K.[6], Aggarwal P.K.[7]
[1]*International Maize and Wheat Improvement Centre (CIMMYT), NASC Complex, New Delhi-110 012, India*
[2]*International Maize and Wheat Improvement Centre (CIMMYT), El-Batan, Texcoco, Mexico*
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42. Towards a scalable framework for evaluating and prioritizing climate-smart agriculture practices and programs

Corner-Dolloff Caitlin[1], Jarvis Andrew[1,2], Loboguerrero Ana Maria[2], Lizarazo Miguel[2], Nowak Andreea[1], Andrieu Nadine[1,3], Howland Fanny[1], Smith Cathy[4], Maldonado Jorge[5], Gomez John[5], Rosenstock Todd S.[6], Girvetz Evan H.[1]
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43. Repeated inputs of organic matter in the long term protect soils from global changes

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44. The use of agroforestry practices by dairy farmers in Malawi

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45. Towards climate-smart dairy value chains in Tanzania

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46. Adapting pest management practices in sub-Saharan horticultural cropping systems in the context of climate change

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47. Promoting Climate Smart Agriculture in Nigeria: Household strategies and determinants among farmers

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48. Climate forecast, sustainable land and practices management, useful tools for implementation a climate smart village

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49. Characterization of biochar properties derived from willow plant biomass for carbon sequestration and agricultural use

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50. Assessing mitigation potential of agricultural practices in tropical, developing country systems

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51. PERPHECLIM ACCAF Project - Perennial fruit crops and forest phenology evolution facing climatic changes

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52. Potential for biochar to mitigate N_2O emissions is minimal at the field scale and in upland cropping systems

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53. Facilitating climate adaptation in irrigated agriculture with decision support systems: El Molino platform

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54. A model-based approach for adapting cropping systems to climate change

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55. Tweaking the system: optimization of mitigation strategies in smallholder flooded rice systems

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56. Effect of coated and uncoated dietary nitrate on dairy cow health and dairy product quality

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57. Rainwater harvesting and conservation: climate smart sustainable techniques for homestead and cropland production

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58. Pathways for Climate Smart Agriculture (CSA) in the drylands of Africa

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59. Climate-smart agriculture: panacea, propaganda or paradigm shift?

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60. Evaluating agricultural mitigation and scaling up climate-smart practices using the FAO EX-Ante Carbon-balance Tool

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61. Characterization, stability, availability of nutrients and microbial effects of kiln produced biochars

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62. Effect of pyrolysis temperatures on stability and priming effects of C3 and C4 biochars applied to two different soils

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63. Smallholders farm carbon footprint reduced by agroecological practices (Highlands & East Coast, Madagascar)

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64. Climate Smart Agriculture imperative in Nepal: prospect and challenges

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65. Big data from small farms: analysis of drivers of food security across farming systems in sub Saharan Africa

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66. Participatory action research in climate-smart villages of Tanzania: fast track for new potato resilient varieties

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67. Prospects of climate smart agriculture (CSA) under low-input and rain-fed conditions in southern Africa

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68. Climate change, promising technologies and ex ante analysis of impacts on agriculture and food security to 2050

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69. Strategies for developing climate resilient genotypes of rice and chickpea

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70. Simulation of spot blotch in wheat as strategic decision support for adaptation practice in changing scenario

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71. To evaluate reforestation in farms: a tool for smallholders and the sustainability of their initiatives (EvaRefo)

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72. Backyard potted yam cultivation in Abuja, Nigeria

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73. Meta-analysis of the effect of dietary nitrate on enteric methane emissions in ruminants

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74. Climate smart strategies to strengthened coffee farmers adaptive capacity to climate change

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75. Linking agricultural adaptation strategies and food security: evidence from West Africa

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76. Quantifying greenhouse gas emissions and carbon storage at the local scale in the U.S.

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77. A systemic approach to evaluate shea parklands as possible smart agriculture to be intensified in Sudanese Africa

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78. Participatory methodology of agricultural extension to Climate Smart Agriculture development: a case in Brazil

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L2.2 FACING CLIMATIC VARIABILITY AND EXTREMES

79. Consequences of high temperatures and drought on peach fruit production strongly depend on their period of occurrence

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80. Reducing uncertainty in prediction of wheat performance under climate change

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81. Managing climate induced risks and adaptation in the agriculture sector; a case of Punjab province Pakistan

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82. Veille Agro Climatique (VAC): a real time monitoring tool for agroclimatic conditions

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83. Modelling of extreme climate events for South Africa using historical data and general circulation models

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84. Beyond incremental change: transformation to climate-smart agriculture in response to changing extremes

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85. Strengthening the capacity of local extension services to face agroclimatic risks for production systems

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86. Grassland manipulation experiments across climatic zones

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87. Building a global framework for banana resilience and adaptation under increased weather variability and uncertainty

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88. Gauging the effects of extreme climate events on European crop yields

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89. Development of district contingency plans as a coping strategy to face climate variability and extremes in agriculture

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90. Why role of local institution is crucial in Climate Smart Agriculture? Some evidence from rice-wheat system of Nepal

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91. Introducing a legume cover crop in rubber plantations is not necessarily an option for their sustainability in dry areas

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92. Sustainability of the Koga irrigation scheme: adaptive water management to deal with climate variability and change

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93. Pearl millet yields and climate evolution across the last 20 years in central Senegal. A yield gap study

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94. Effective adaptation strategies and risk reduction to increased climatic variability among coffee farmers in Mesoamerica

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95. Impact of climate change on crop production in southern Mali and the potential of adaptation strategies

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96. Use of regional climate model output for modelling the effects of future extremes in agriculture

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97. Drought resistant and resilient plant functional types can maintain production in intensively managed grassland

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98. Phenotypic variation among and within thirty accessions of Onobrychis viciifolia examined under climate change scenarios

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99. Participatory assessment of vulnerability to climate change for improved adaptations to climate smart agriculture

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100. Adaptation strategies for livestock production systems in a changing environment

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101. Impact of climate extreme and variability on agriculture: a case from mountain community of eastern Nepal

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102. Analyses of extreme weather events and its impact to agriculture smallholders in Gandaki River Basin of Nepal Himalaya

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103. Developmental competence and expression pattern of heat shock protein genes in buffalo oocytes during heat stress

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104. Heat tolerance in wheat identified as a key trait for increased yield potential in Europe under climate change

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105. Is livelihood diversification Climate-Smart Agricultural strategy? Micro-evidence from Malawi

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106. Prospering rural vulnerable despite climate change: implications for "Triple Win"

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107. Participatory climate risk management at short-term and seasonal scales – examples from South Asia

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108. Establishment of dynamic-transfer system for agro-climate knowledge and farmers' response

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109. Empirical assessment of climate change on major agricultural crops of Punjab, Pakistan

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110. Perceptions on climate change and impacts on ecosystem services in eastern Africa: implications for policy actions

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111. Irrigation management of salt water: study of potato and pea grown in intercropping with olive in southern Tunisia

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112. Assessment of the variability of yield of maize in Lilongwe district in relation to climate using DSSAT model

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L2.3 COMBINING MITIGATION, ADAPTATION AND SUSTAINABLE INTENSIFICATION

113. Agricultural intensification trajectories and climate smart agriculture in Nicaraguan tropical systems

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114. Value of estimating farm GHG budgets making use of process-based modelling

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115. Farmer's perceptions on climate change and prospects for climate smart agriculture along the tree cover transition curve

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116. The Agritech Water Cluster – Promoting collaboration to manage future water needs of the agriculture sector

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117. Climate change mitigation and agricultural development scenarios for the high plains of Eastern Colombia

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118. Contributing to CSA progress through a national multidisciplinary research program on adaptation to climate change

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119. Could agroforestry be a way to limit soil erosion susceptibility under a temperate climate?

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120. Scientific and policy recommendations for climate smart arable agriculture in Europe: lessons from the past decade

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121. Adaptation to climate change through land-use change in France and implications for greenhouse gas emissions

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122. Mitigating GHG emissions from ruminant livestock systems

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123. Global assessment of technological innovation for climate change in developing countries: opportunities and challenges

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124. Synergies and trade-offs of adaptation and mitigation on dairy farms

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125. Land management practices as a coping mechanism to frequent and prolonged drought spells by smallholder farms

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126. Sustainable intensification of global maize cropping systems: balancing yield increase and nitrous oxide emissions

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127. Temperature impact on CO_2 emissions and nutrients availability in Malagasy soils under different farming practices

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128. The synergies of fertilization on carbon sequestration and food security in China

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129. Adaptation to climate variability: evaluation of adaptation tools for the agricultural sector in Guanacaste, Costa Rica

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130. Efficiently mitigating climate change through improved land management in smallholder agriculture of Malawi and Zambia

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131. Climate-Smart water and nitrogen management strategies for lowland rice

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132. Storing C in agricultural soils: evaluating triple-win climate-smart actions for France

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133. Innovative cropping systems under GHG emissions constraint: results of a long-term field trial assessment

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134. Contribution of agroforestry to livelihoods and climate change mitigation in Western Kenya

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135. Alternative water management minimizes greenhouse gas emissions from rice systems while maintaining yield

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136. Climate mitigation: trade-offs between agricultural product carbon footprints and land use intensity

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137. Integrated fertiliser microdosing and organic manure to adapt to climate variability and change in Northern Benin

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138. The Global Yield Gap Atlas for targeting sustainable intensification options for smallholders in Sub-Saharan Africa

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139. Impacts of agricultural diversity on self-sufficiency for forage, feeding costs and GHG emissions in dairy systems

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140. Water resources transfers through southern African food trade: resource efficiency and climate adaptation

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141. Municipal solid waste composts as organic inputs in vegetable gardening cropping systems in Mahajanga, Madagascar

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142. Evaluating the impact of rising fertilizer prices on crop yields

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143. Agent based model analysis on the impact of agricultural land-use change adaptation in semi-arid Ghana

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144. The gathering of Non-Timber Forest Products as adaptation strategy to climate change in the rural community of Niaguis

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145. Optimisation of the nitrogen fertilisation in the context of climate change

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146. Climate change impacts on crops production and adaptive measures from farmers' perspective in North-East China

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147. Emissions mitigation by sustainable intensification in Brazilian livestock production

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L2.4 BREEDING AND PROTECTING CROPS AND LIVESTOCK

148. Adaptation of tropical cattle breeds to their environment, in the perspective of climatic change

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149. Genetic diversity of Dactylis glomerata in the response to temperature during germination

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150. Globally representative C. arabica variety trial site selection in a changing climate

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151. "ReColAd": Collaborative network on farm animal adaptation to environmental changes

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152. Crop diversity as an adaptation strategy to climate change in West Africa

Piquet J.[1,2,3], Barnaud Adeline[1,2,3],. Barry M.B [4], Berthouly-Salazar C.[1,2,3], Diallo M.A.T.[4], Deu M.[5], Kané N.A.[3], Leclerc C.[5], Noyer J.L.[5], Pham J.L.[1,6], Vigouroux Y.[1], Billot C.[5]
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153. Genetic variability and phenotypic characterization of thermotolerance in rainbow trout

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154. NGS for identifying wild-to-cultivated gene flow for African crops adaptation

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155. Impact of pea genetic variability on the control of N_2O reduction by soil-microorganisms-plant systems

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156. Using crop-climate models for designing climate-smart breeding strategies

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157. Genetics of tolerance of extra-early Quality Protein Maize inbreds under contrasting environments

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158. Adaptation of alfalfa ecotypes to climate change

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159. Improvement of yield and related characters of temperate maize (Zea mays L.) under three water regimes

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160. Breeding for sunflower hybrids adapted to climate change: the SUNRISE collaborative and multi-disciplinary project

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161. Climate change in tropical environment: what impact on agricultural pests and diseases? What crop protection strategies?

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162. Understanding the genetic diversity of Ethiopian oilseed Noug (Guizotia abissinica) for its improvement and conservation

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163. Proteomics in the drive for climate smart livestock production

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164. Bridging landscape genomics and quantitative genetics for a regional adaptation of European grasslands to climate-change

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165. Ecological niche of R. fistulosa in climate change context: what future for lowland rice production in West-Africa?

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166. Effects of heat stress and sulfur restriction during seed filling on grain characteristics in rapeseed

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167. Selection of families new of rice for their adaptability of lowland in West Africa

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168. Evaluation of triticale genotypes for food and feed security in Egypt

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169. Improving Bambara groundnut for global food security: MAGIC populations for ideotype development and genomic analysis

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170. Genetics in controlling small ruminant's internal nematodes infestation in the era of climate change

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171. Climate change impact on incidence of mite (Tetranychus urticae Koch) infesting ladysfinger in sub-Himalayan India

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L2.5 OVERCOMING BARRIERS: POLICIES AND INSTITUTIONAL ARRANGEMENTS TO SUPPORT CSA

172. Cross-scale policy dynamics and climate smart agriculture

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173. Theory and criteria for improved understanding of Climate Smart Territories (CST)

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174. Scenario-guided policy development and investment for Climate Smart Agriculture in Cambodia

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175. Effects of the Jordanian rainfed barley-livestock producer perceptions and values on their adaptation to climate change

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176. Climate Smart Agriculture in the Northeast: assessing stakeholders' belief-action gaps and research/extension capacity

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177. Barriers to the adoption and diffusion of CSA technological innovations in Europe

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178. Necessity of clear concepts and convergence of discourse for a climate-smart agriculture (Costa Rica)

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179. A rights-based approach to realizing socially equitable development outcomes from climate smart agriculture

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180. Implications of alternative GHG emission metrics for emission trends and targets

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181. Climate smart agriculture without climate smart spatial planning?

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182. Forestry and agriculture in the climate change governance: Non-UNFCCC venues for enhancing action

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183. Barriers to uptake of conservation agriculture in Malawi: multi-level analyses & development planning implications

Dougill Andrew[1], Whitfield Stephen[1], Wood Ben[1], Chinseu Edna[1], Mkwambisi David[2], Stringer Lindsay[1]
[1]*School of Earth & Environment, University of Leeds, Leeds, United Kingdom*
[2]*Department of Natural Resources, Lilongwe University of Agriculture and Natural Resources, Lilongwe, Malawi*

184. Policies for climate-smart agriculture: contribution of agroforestry literature

Durey Louis[1], Le Coq Jean François[2]
[1]*AGROPARISTECH (Institut des sciences et de l'industrie du vivant et de l'environnement), 16 rue Claude Bernard F-75231 Paris Cedex 05, France*
[2]*CIRAD, UMR ART-Dev, F-34398 Montpellier Cedex 5, France; UNA (National University of Costa Rica), CINPE, Heredia, Costa Rica*

185. Learning and sharing for action: experiences of Ghana climate change and food security platform

Karbo Naaminong[1], Botchway Vincent[1], Zougmore Robert[2], Odum K. S.[1]
[1]*CSIR-Animal Research Institute, Accra, Ghana*
[2]*ICRISAT, Bamako, Mali*

186. Linking climate change adaptation and mitigation: Implications for Central America

Cuéllar Nelson, Kandel Susan, Gómez Ileana, Cartagena Rafael, Luna Fausto, Diáz Oscar

Fundación PRISMA, Pasaje Sagrado Corazón #821, Colonia Escalón, San Salvador, El Salvador

187. Social learning in support of CSA: getting to outcomes and impact

Förch Wiebke[1], Thornton Philip[1], Schuetz Tonya[2], Harvey Blane[3]

[1]*CCAFS, ILRI, PO Box 30709, Nairobi 00100, Kenya*

[2]*Orleansstr. 59, D-81667 Munich, Germany*

[3]*Collaborative Adaptation Research Initiative in Africa and Asia (CARIAA), IDRC, PO Box 8500, Ottawa, ON K1G 3H9, Canada*

188. Policy instruments for Climate Smart Agriculture: toward a specific integrated analytical framework

Le Coq Jean-Francois[1,2], Fallot Abigail[3,4], Bouroncle Claudia[4]

[1]*CIRAD UMR ART-DEV, 34000 Montpellier, France*

[2]*UNA/CINPE, 3000 Heredia, Costa Rica*

[3]*CIRAD UPR GREEN, 34000 Montpellier, France*

[4]*CATIE-Climate Change and Watershed group; 30 501 Turrialba, Costa Rica*

189. Building local capacity in agricultural carbon projects in Kenya and Uganda through participatory action research

Shames Seth[1], Heiner Krista[1], Masiga Moses[2], Recha John[3], Kapukha Martha[4], Ssempala Annet[5], Wekesa Amos[4]

[1]*EcoAgriculture Partners, 1100 17th St, NW Suite #600, Washington, DC 20036, USA*

[2]*ENR Africa Associates, P.O. Box 72287, Kampala, Uganda*

[3]*Environmental Resources Management Center for Sustainable Development [ERMCSD], Utumishi Cooperative House, Mezzanine Floor, Mamlaka Road, Off Nyeyere Road, P.O. BOX 1728 – 00100, Nairobi, Kenya*

[4]*Vi-Agroforestry Regional Office, P.O. Box 457 67 00100 Nairobi, Kenya*

[5]*Environmental Conservation Trust of Uganda (ECOTRUST), Plot 49 Nakiwogo Road, Entebbe, Uganda*

190. What does it take to see transformative adaptation? Evidence from sub-Saharan Africa

Bernier Quinn[1], Kristjanson Patti[2], Meinzen-Dick Ruth[1]

[1]*International Food Policy Research Institute, 2033 K Street NW, Washington DC, 20006, USA*

[2]*World Agroforestry Centre, United Nations Avenue, P. O. Box 30677, Nairobi, Kenya*

191. Is technical information what policy makers need to take action on the climate change adaptation of smallholder farmers?

Donatti Camila I.[1], Martínez-Rodríguez M.R.[1], Harvey Celia A.[1], Vignola R.[2], Rodríguez C.M.[3]

[1]*Conservation International, The Betty and Gordon Moore Center for Science and Oceans, 22202, Arlington, VA, USA*

[2]*CATIE, Climate Change and Watershed Program, 7170, Turrialba, Costa Rica*

[3]*Conservation International, Center for Environmental and Peace, 22202, Arlington, VA, USA*

192. Drip irrigation works: drip irrigation kits do not

Davidson Michael

Davidson Consultants, 1169 Boston Street, Altadena, CA 91001, USA

193. Barriers to adaptation and mitigation to climate change in livestock farms of Africa, South America and Europe

Frey Hélène[1], Vayssières Jonathan[1], Messad Samir[1], Koslowski Franck[2], Stienezen Marcia[3], Cardoso Viera Paulo[4], Poccard René[1], Blanchard Mélanie[1], Silvestri Silvia[5], García de Jalón Silvestre[6], Lecomte Philippe[1]

[1]*CIRAD, French Agricultural Research Centre for International Development, Umr SELMET Tropical and Mediterranean Livestock Production Systems, 34398, Montpellier, France*

[2]*SRUC, Scotland's Rural College, Department of Land Economy, Environment & Society Research Group, EH93JG, Edinburgh, Scotland*

[3]*WUR, Wageningen University, Livestock Research, 6708 WD, Wageningen, The Netherlands*

[4]*UFRGS, Universidade Federal do Rio Grande do Sul, Faculdade de Agronomia, Grazing Ecology Research Group, 91540, Porto Alegre, Brazil*

[5]*ILRI, International Livestock Research Institute, 00100, Nairobi, Kenya*

[6]*UPM, Technical University of Madrid, Department of Agricultural Economics and Social Sciences, 28040, Madrid, Spain*

PARALLEL SESSION L3 TOWARDS CLIMATE-SMART SOLUTIONS

Wednesday, 18 March 2015

8:30–12:30

ORAL PRESENTATIONS

PARALLEL SESSION L3.1 CLIMATE ADAPTATION AND MITIGATION SERVICES

ROOM SULLY 1

KEYNOTE PRESENTATIONS

08:30 AgMIP Contributions to Climate-Smart Agriculture

Rosenzweig Cynthia[1,2]
[1]*NASA Goddard Institute for Space Studies, 2880 Broadway, New York, NY 10025, USA*
[2]*Center for Climate Systems Research, Columbia University, New York, NY 10025, USA*

09:00 Adaptation and mitigation services for climate smart agriculture

Moors Eddy, Groot Annemarie, Werners Saskia
Alterra-Wageningen UR, Wageningen, the Netherlands

CONTRIBUTED ORAL PRESENTATIONS

11:00 Public-private partnership for climate-smart irrigation initiative in Morocco: the experience of Souss Massa Region

Lahcen Kenny[1], Hafidi Brahim[2], El Faskaoui Mhamed[3], Rami Abdellatif[4], Akhmisse Laila[5], Chemaou Hasna[5]
[1]*IAV Hassan II, CHA / AGROTECH, Agadir, Morocco*
[2]*Conseil Régional du Souss Massa Draa, Agadir, Morocco*
[3]*Agence du Bassin Hydraulique du Souss Massa Draa, Agadir, Morocco*
[4]*Agrotech-SMD; Agadir, Morocco*
[5]*Fondation Credit Agricole du Maroc pour le Développement Durable, Rabat, Morocco*

11:15 DSS for monitoring agro-meteorological and crop conditions in India using remote sensing for agro-advisory services

Sehgal Vinay, Singh Malti, Verma Rakeshwar, Vashisth Ananta, Pathak Himanshu
Division of Agricultural Physics, Indian Agricultural Research Institute, New Delhi - 110012, India

11:30 Can citizen science accelerate climate adaptation by poor farming households?

van Etten Jacob[1], Alwang Jeffrey[2], Arnaud Elizabeth[3], Beza Eskender[4], Calderer Lluis[1], Crichton Rhiannon[3], Eitzinger Anton[5], van Duijvendijk Kees[6], Fadda Carlo[7], Fantahun Basazen[8], van de Gevel Jeske[7], Gotor Elisabetta[9], Kassahun Mengistu Dejene[10], Kaushik S.S.[11], Kidane Yosef G.[12], Mathur Prem[13], Mercado Leida[14], Mittra Sarika[13], Moeller Anne Marie[15], Mondal Ashis[16], Pė M. Enrico[17], Richter Susan[2], Rosas Juan Carlos[18], Singh R.K.[19], Solanki I.S.[20], Steinke Jonathan[1,21], Van den Bergh Inge[22], Zimmerer Karl[23]
[1]*Bioversity International, Costa Rica Office, c/o CATIE 7170, Turrialba, Costa Rica*
[2]*Virginia Polytechnic Institute and State University, Blacksburg, Virginia, USA*
[3]*Bioversity International, France Office, 34397 Montpellier Cedex 5, France*
[4]*Wageningen University and Research Centre, Wageningen, the Netherlands*
[5]*Decision and Policy Analysis, CIAT – International Center for Tropical Agriculture, Cali, Colombia*
[6]*Lund University, SE-221 00 Lund, Sweden*
[7]*Bioversity International, Sub-Saharan Africa Office, Nairobi, Kenya*
[8]*Ethiopian Biodiversity Institute (EBI), Addis Ababa, Ethiopia*

[9]*Bioversity International, Via dei Tre Denari 472/a, Maccarese 00057, Italy*
[10]*Department of Dryland Crop and Horticulture Science, Mekelle University, Mekelle, Tigray, Ethiopia*
[11]*Krishi Vigyan Kendra, Satna - 485331 (M.P.), India*
[12]*Sirinka Agricultural Research Centre, Woldia, Ethiopia*
[13]*Bioversity International, Asia, Pacific and Oceania Office, New Delhi, India*
[14]*CATIE - Tropical Agricultural Research and Higher Education Center, 7170, Turrialba, Costa Rica*
[15]*Humana People to People India, New Delhi-110070, India*
[16]*Action for Social Advancement, Bhopal, Madhya Pradesh-462016, India*
[17]*Scuola Superiore S. Anna, Piazza Martiri Della Libertà, 33, 56127 Pisa, Italy*
[18]*Zamorano Pan-American Agricultural School, Honduras*
[19]*NEFORD, Vishnupuri, Aliganj, Lucknow, India*
[20]*.S. Pusa Bihar, Indian Agricultural Research Institute - IARI, New Delhi, India*
[21]*Humboldt-Universität, 10099 Berlin, Germany*
[22]*Bioversity International, Belgium Office, W. De Croylaan 42, 3001 Heverlee, Belgium*
[23]*Department of Geography, Penn State University, 16802, University Park, Pennsylvania, USA*

11:45 An international intercomparison & benchmarking of crop and pasture models simulating GHG emissions and C sequestration

Ehrhardt Fiona[1], Soussana Jean-François[1], Grace Peter[2], Recous Sylvie[3], Snow Val4, Bellocchi Gianni[5], Beautrais Josef[6], Easter Mark[7], Liebig Mark[8], Smith Pete[9], Celso Aita[10], Bhatia Arti[11], Brilli Lorenzo[12], Conant Rich[7], Deligios Paola[13], Doltra Jordi[14], Farina Roberta[15], Fitton Nuala[9], Grant Brian[16], Harrison Matthew[17], Kirschbaum Miko[18], Klumpp Katja[5], Léonard Joël[19], Lieffering Mark[6], Martin Raphaël[5], Massad Raia Sylvia[20], Meier Elizabeth[21], Merbold Lutz[22], Moore Andrew[21], Mula Laura[13], Newton Paul[21], Pattey Elizabeth[16], Rees Bob[23], Sharp Joanna[24], Shcherback Iurii[2], Smith Ward[16], Topp Kairsty[23], Wu Lianhai[25], Zhang Wen[26]
[1]*INRA, Paris, France*
[2]*Queensland University of Technology, Brisbane, Australia*
[3]*INRA, UMR FARE, Reims, France*
[4]*AgResearch, Lincoln Research Centre, Christchurch, New Zealand*
[5]*INRA, Grassland Ecosystem Research (UR874), Clermont Ferrand, France*
[6]*AgResearch Grasslands, Palmerston North, New Zealand*
[7]*NREL, Colorado State University, Fort Collins, USA*
[8]*USDA Agricultural Research Service, Mandan, USA*
[9]*Institute of Biological and Environmental Sciences, University of Aberdeen, Scotland, United Kingdom*
[10]*Federal University of Santa Maria, Santa Maria, Brazil*
[11]*Indian Agricultural Research Institute, New Delhi, India*
[12]*University of Florence, DISPAA, Florence, Italy*
[13]*Desertification Research Centre, University of Sassari, Italy*
[14]*Cantabria Agricultural Research and Training Centre, Muriedas, Spain*
[15]*ARC-RPS, Research Centre for the Soil-Plant System, Roma, Italy*
[16]*Agriculture and Agri-Food Canada, Ottawa, Canada*
[17]*Tasmanian institute of Agriculture, Burnie, Australia*
[18]*Landcare Research, Palmerston North, New Zealand*
[19]*INRA, UPR 1158 AgroImpact, Laon, France*
[20]*INRA AgroParisTech UMR EGC, Thiverval-Grignon France*
[21]*CSIRO, Australia*
[22]*Swiss Federal Institute of Technology ETH Zurich, Zurich, Switzerland*
[23]*SRUC Edinburgh Campus, Scotland, United Kingdom*
[24]*The New Zealand Institute for Plant & Food Research, New Zealand*
[25]*Department of Sustainable Soil Science and Grassland System, Rothamsted Research, United Kingdom*
[26]*Institute of Atmospheric Physics, Chinese Academy of Sciences, Beijing, China*

PARALLEL SESSION L3.2 CLIMATE-SMART CROPPING SYSTEMS

ROOM SULLY 2

KEYNOTE PRESENTATIONS

08:30 Climate Smart Agriculture – adaptation or transformation

Obersteiner Michael[1], Leclère David[1], Havlík Petr[1], Fuss Sabine[2,1], Schmid Erwin [3], Mosnier Aline[1], Walsh Brian[1], Valin Hugo[1], Herrero Mario[4], Khabarov Nikolai[1]

[1]*Ecosystem Services Management, International Institute of Applied System Analysis, Laxenburg, Austria*
[2]*Resources and International Trade Group, Mercator Research Institute on Global Commons and Climate Change, Berlin, Germany*
[3]*Institute for Sustainable Economic Development, University of Natural Resources and Life Sciences, Vienna, Austria*
[4]*Commonwealth Scientific and Industrial Research Organisation, 306 Carmody Road, 4067 Qld, Australia*

09:00 Designing and assessing climate-smart cropping systems in temperate and tropical agriculture

Debaeke Philippe[1], Pellerin Sylvain[2], Scopel Eric[3]
[1]*INRA, UMR AGIR, 31326 Castanet-Tolosan, France*
[2]*INRA, UMR ISPA, 33883 Villenave d'Ornon, France*
[3]*CIRAD, UR AIDA, 34398 Montpellier, France*

CONTRIBUTED ORAL PRESENTATIONS

11:00 Phosphorus use efficiency in symbiotic N_2 fixation for coupling bio-geochemical cycles in agrosystems with legumes

Drevon Jean-Jacques[1], Amenc Laurie[1], Bargaz Adnane[2], Becquer Thierry[1], Blavet Didier[1], Gérard Frédéric[1], Domergue Odile[3], Lazali Mohamed[4], ZamanAllah Mainassara[5]
[1]*INRA Ecologie Fonctionnelle & Biogéochimie des Sols & Agroécosystèmes, 1 Place Viala, F34060, Montpellier, France*
[2]*Swedish University of Agricultural Sciences, Department of Biosystems and Technology, PO Box 103, SE-230 53 Alnarp, Sweden*
[3]*Laboratoire des Symbioses Tropicales et Méditerranéennes, Campus International de Baillarguet, 34398 Montpellier Cedex 5, France*
[4]*Université de Khemis Miliana, Route Theniet El Had, Soufay 44225 Ain Defla, Algeria*
[5]*CIMMYT, Southern Africa Regional Office, Peg Mazowe Road MP163, Mt Pleasant, Harare, Zimbabwe*

11:15 Conservation agriculture and agroecology practices to mitigate climatic variations in medium altitude in Madagascar

Penot Eric[1], Fèvre Valentin[2], Flodrops Patricia[2], Razafimahatratra Hanitriniaina Mamy[3]
[1]*CIRAD UMR innovation, DP SPAD, DR CIRAD, BP 853, Anpandrianomby, 101 Antananarivo, Madagascar*
[2]*Agroparistech, DP SPAD, DR CIRAD, BP 853, Anpandrianomby, 101 Antananarivo, Madagascar*
[3]*FOFIFA, Apandrianomby, 101 Antananarivo, Madagascar*

11:30 Agronomic and environmental benefits of climate-smart farming practices modeled for rice-based system in India

Kwon Hoyoung, de Pinto Alessandro, Haruna Akiko
Environment and Production Technology Division, International Food Policy Research Institute, 2033 K Street, NW, 20006-1002 Washington DC, USA

11:45 Smallholders' coffee and cocoa agroforestry systems; examples of climate-smart agriculture

Vaast Philippe[1], Harmand Jean-Michel[2], Somarriba Eduardo[3]
[1]*CIRAD, UMR Eco&Sols, ICRAF United Nations Avenue POBOX 30677, Nairobi Kenya*
[2]*CIRAD, UMR Eco&Sols, 2 Place Viala (Bat. 12), 34060 Montpellier cedex 2, France*
[3]*CATIE, 7170, Cartago, Turrialba 30501, Costa Rica*

PARALLEL SESSION L3.3 CLIMATE-SMART LIVESTOCK

ROOM SULLY 3

KEYNOTE PRESENTATIONS

08:30 Climate-smart livestock systems: lessons and future research

Herrero Mario[1], Thornton Philip K.[2], van Wijk Mark[3], Rigolot Cyrille[1,4], Havlik Petr[5], Henderson Benjamin[1], Ash Andrew[1], Crimp Steven[1], Howden Stuart Mark[1]
[1]*Commonwealth Scientific and Industrial Research Organisation, Agriculture Flagship, Australia*
[2]*CGIAR Research Programme on Climate Change, Agriculture and Food Security, ILRI, Nairobi, Kenya*
[3]*International Livestock Research Institute, Nairobi, Kenya*
[4]*INRA, UMR 1273 Metafort, F-63122 Saint Genes Champanelle, France*
[5]*International Institute for Applied Systems Analysis, Laxenburg, Austria*

09:00 Livestock and climate change: combining mitigation and adaptation options and projecting sustainable futures

Soussana Jean-François[1] and the EC FP7 'AnimalChange' consortium (see www.animalchange.eu)
[1]*INRA, Paris, France*

CONTRIBUTED ORAL PRESENTATIONS

11:00 Differential climate change impacts on crop and grasslands and the relative livestock production systems competitiveness

Havlík Petr[1], Leclere David[1], Valin Hugo[1], Herrero Mario[2], Schmid Erwin[3], Obersteiner Michael[1]
[1]*International Institute for Applied Systems Analysis, Schlossplatz 1, A-2361 Laxenburg, Austria*
[2]*Commonwealth Scientific and Industrial Research Organisation 306 Carmody Road, St Lucia, 4067 QLD, Australia*
[3]*University of Natural Resources and Life Sciences, Feistmantelstraße 4, A-1180 Vienna, Austria*

11:15 Efficiency gains for enteric methane mitigation and productivity: contribution to CSA and investment opportunities.

Gerber Pierre[1], Opio Carolyn[1], Mottet Anne[1], Steinfeld Henning[1], Hatton Victoria[2], Clark Harry[2]
[1]*Food and Agriculture Organization of the United Nations, Rome, Italy*
[2]*New Zealand Agricultural Greenhouse Gas Research Centre, Palmerston North, New Zealand*

11:30 Variations in egg incubation temperature enable chicken acclimation through long-lasting changes in energy metabolism

Loyau Thomas[1], Métayer-Coustard Sonia[1], Berri Cécile[1], Mignon-Grasteau Sandrine[1], Hennequet-Antier Christelle[1], Praud Christophe[1], Duclos Michel J.[1], Tesseraud Sophie[1], Coustham Vincent[1], Nyuiadzi Dzidzo[1,2], David Sarah-Anne[1], Everaert Nadia[3,4], Siegel Paul B.[5], Yalçin Servet[6], Yahav Shlomo[7], Collin Anne[1]
[1]*INRA, UR83 Recherches Avicoles, F-37380, Nouzilly, France*
[2]*Institut Togolais de Recherche Agronomique (ITRA), BP 1163, Lomé, Togo*
[3]*KU Leuven, Department of Biosystems, B-3001 Leuven, Belgium*
[4]*University of Liège, Gembloux Agro-Bio Tech, Animal Science Unit, B-5030 Gembloux, Belgium*
[5]*Virginia Polytechnic Institute and State University, Department of Animal and Poultry Sciences, Blacksburg, Virginia 24061-0306, USA*
[6]*Ege University, Faculty of Agriculture, Department of Animal Science, 35100 Izmir, Turkey*
[7]*Institute of Animal Science, The Volcani Center, Bet Dagan P.O. Box 6, 50250, Israel*

11:45 Impact of feeding strategies on GHG emissions, income over feed cost and economic efficiency on milk production

Inamagua-Uyaguari Juan Pablo[1], Jenet Andreas[1], Wattiaux Michel[3], Guerra Leonardo[1], Vilchez Sergio[1], Chacón-Cascante Adriana[1], Posada Karla[1], Barrantes Luz[2], Casasola Francisco[1], Villanueva Cristobal[1], Leon Hector[4], Lapidus Daniel[5]
[1]*Centro Agronómico Tropical de Investigación y Enseñanza (CATIE), 30501 Turrialba, Costa Rica*
[2]*Universidad de Costa Rica, Centro de Investigación en Economía Agrícola y Desarrollo Agroempresarial (CIEDA) 141-2400 Costa Rica*
[3]*University of Wisconsin-Madison, USA*
[4]*Cooperativa Dos Pinos; 179-4060 Alajuela, Costa Rica*
[5]*U.S. Department of Agriculture, 1400 Independence Ave., S.W.; Washington, DC 20250 USA*

PARALLEL SESSION L3.4 CLIMATE-SMART LANDSCAPES, WATERSHEDS AND TERRITORIES

ROOM RONDELET

KEYNOTE PRESENTATIONS

08:30 Climate Smart Territories; what are they and how do we evaluate progress towards this goal?

Beer John[1], Louman Bastiaan[1], Mercado Leida[1], Scherr Sara[2], Van Etten Jacob[3]
[1]*CATIE, Costa Rica*
[2]*EcoAgriculture Partners, USA*
[3]*Bioversity International*

09:00 Towards climate smart landscapes and watersheds

Oswald-Spring Úrsula
CRIM-UNAM, Mexico

CONTRIBUTED ORAL PRESENTATIONS

11:00 Prototyping climate-smart agricultural landscapes: a generic modelling framework and application in a tropical island

Blazy Jean-Marc[1], Chopin Pierre[1], Doré Thierry[2,3], Guindé Loïc[1], Paul Jacky[1], Sierra Jorge[1]

[1]*INRA, UR1321 ASTRO Agrosystèmes tropicaux, F-97170 Petit-Bourg (Guadeloupe), France*
[2]*AgroParisTech, UMR 211 Agronomie, F-78850 Thiverval-Grignon, France*
[3]*INRA, UMR 211 Agronomie, F-78850 Thiverval-Grignon, France*

11:15 Managing trade-offs in climate-smart landscapes: a global analysis at multiple levels

Locatelli Bruno[1], Pramova Emilia[2], Chazarin Florie[2], Fedele Giacomo[3]
[1]*CIRAD-CIFOR, Montpellier 34098, France*
[2]*CIFOR, Av La Molina 1895, Lima 15024, Peru*
[3]*CIFOR, Jalan Cifor, Bogor 16000, Indonesia*

11:30 Climate-smart landscapes: multifunctionality in practice

Minang Peter A., Van Noordwijk Meine, Duguma Lalisa A.
ICRAF, UN Avenue, Gigiri, P O Box 30677-00100, Nairobi, Kenya

11:45 A platform for landscape ecoefficiency monitoring and jurisdictional certification in the Amazon region

Ferreira Joice[1], Poccard-Chapuis René[2], Laurent François[3], Plassin Sophie[2], Thalês Marcelo[4], Moura Fabricia[4], Pimentel Gustavo[5], Piketty Marie-Gabrielle[6]
[1]*Embrapa Amazonia Oriental, Belém - PA, 66095-100, Brazil*
[2]*UMR SELMET – CIRAD, Paragominas - PA, 68626-140, Brazil*
[3]*Université du Maine, Le Mans 72085, France*
[4]*Museu Paraense Emilio Goeldi, Belém - PA, 66095-100, Brazil*
[5]*Embrapa Amazonia Oriental, Belém - PA 66095-100, Brazil*
[6]*UR GREEN – CIRAD, Montpellier 34000, France*

PARALLEL SESSION L3.5 INVESTMENT OPPORTUNITIES AND FUNDING INSTRUMENTS

ROOM BARTHEZ

KEYNOTE PRESENTATIONS

08:30 Delivering Climate Smart Agriculture: prospects from climate finance

Hedger Merylyn, Nakhooda Smita, Norman Marigold
Overseas Development Institute, London, United Kingdom

09:00 "What Can Fund Climate Smart Agriculture?"

Searchinger Timothy D.
Princeton University, USA

CONTRIBUTED ORAL PRESENTATIONS

11:00 How to deal with trade-offs? – A manual for policymakers

Ignaciuk Ada
OECD, 2 rue Andre Pascal, 75016 Paris, France

11:15 Exploring strategic management of agricultural systems to link mitigation and adaptation to climate change

Iglesias Ana, Sanchez Berta
Department of Agricultural Economics and Social Sciences, Universidad Politécnica de Madrid, Madrid, Spain

11:30 Nationally appropriate mitigation actions (NAMAs) for upscaling climate-smart agriculture practices

Avagyan Armine, Karttunen Kaisa, De Vit Caroline, Rioux Janie
Food and Agriculture Organisation of the United Nations (FAO), Viale delle Terme di Caracalla, 00153 Rome, Italy

11:45 A business approach to poverty reduction: weather index based insurance and climate smart agriculture

Greatrex Helen[1], Hansen James[1], Hellin Jon[2], Osgood Daniel Edward[1]
[1]*International Research Institute for Climate and Society (IRI), Columbia University, Lamont Doherty Earth, 61 Route 9W, Palisades, New York 10964-1000, USA*
[2]*International Maize and Wheat Improvement Center (CIMMYT), Apdo. Postal 6-641, Mexico, D.F. 06600, Mexico*

POSTER SESSION 3

Wednesday, 18 March 2015

9:30–11:00

EXHIBITION HALL, LEVEL 0

L3.1 Climate adaptation and mitigation services

1. Scaling up climate information services within climate smart agriculture

Jay Alexa[1], Tall Arame[2]
[1]International Research Institute for Climate and Society, Earth Institute, Columbia University, 61 Route 9W, Palisades, NY 10964, USA
[2]International Food Policy Research Institute, 2033 K Street, NW Washington, DC 20006-1002, USA

2. Upscaling climate smart agriculture for food security in the Sahel region

Bilgo Ablasse[1], Subsol Sébastien[1], Botoni Yaro Edwige[2], Sarr Benoit[1]
[1]Centre Régional AGRHYMET, BP 11011 Niamey, Niger
[2]Secrétariat Exécutif du Comité permanent Inter-Etats de Lutte contre la Sécheresse au Sahel (CILSS), 03 BP 7049, Ouagadougou, Burkina Faso

3. Index-based insurance for income stabilization for smallholder farms in Central Asia

Bobojonov Ihtiyor[1], Aw-Hassan Aden[2], Biradar Chandrashekar[2], Nurbekov Aziz[3]
[1]Leibniz Institute of Agricultural Development in Transition Economies (IAMO), Germany
[2]ICARDA, Abdoun Al-Shamalie, Khalid Abu Dalbouh Str., Amman 11195, Jordan
[3]ICARD, Tashkent, Uzbekistan

4. Preliminary results obtained in the CLIF Project on climate change impact on fungal pathosystems

Huber Laurent[1], Bancal Marie-Odile[1], Zurfluh Olivier[1], Huard Frédéric[2], Launay Marie[2], Andrivon Didier[3], Androdias Annabelle[3], Corbière Roselyne[3], Mariette Nicolas[3], Belaid Yosra[4], de Vallavieille-Pope Claude[4]
[1]INRA, UMR 1091 EGC, F-78850 Thiverval-Grignon, France
[2]INRA, US 1116 AGROCLIM, F-84914 Avignon, France
[3]INRA, UMR 1349 IGEPP, F-35653 Le Rheu, France
[4]INRA, UR 1290 Bioger, F-78850 Thiverval-Grignon, France

5. Modelling greenhouse gas emission under extensive livestock production systems in Kalahari South Africa

Tesfamariam Eyob H.[1], Hassen Abubeker[2], Booyse Maruzaan[2], Hutchings Nicholas J.[3], Stienezen Marcia[4]
[1]Department of Plant Production and Soil Science, University of Pretoria, South Africa
[2]Department of Animal and Wild Life Sciences, University of Pretoria, South Africa
[3]Department of Agroecology - Climate and Water, Aarhus University, Denmark
[4]Wageningen UR Livestock Research, Wageningen, the Netherlands

6. Institutionalizing crop yield forecasting for early warning in Nepal

Gyawali Dhiraj Raj[1], Kanel Damodar[1], Burja Kurstin Vance[1], Arun Khatri-Chhetri[2]
[1]United Nations World Food Programme, Nepal Food Security Monitoring System (NeKSAP), Vulnerability Analysis and Mapping (VAM), Lalitpur, Nepal
[2]CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS), International Water Management Institute, New Delhi, India

7. Analysis of extreme climate events and their impact on maize and wheat

Diriba Tadele Akeba[1], Debusho Legesse Kassa[1], Botai Joel [2], Hassen Abubeker [3]
[1]University of Pretoria, Department of Statistics, Private Bag X20, Hatfield, 0028 Pretoria, South Africa.
[2]University of Pretoria, Department of Geography, Geoinformatics and Meteorology, 0028 Pretoria, South Africa
[3]University of Pretoria, Department of Animal and Wildlife Sciences, 0028 Pretoria, South Africa

8. Farmer rice field adaptation technology for rice-wheat cropping system in Punjab, Pakistan under future changing climate

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9. Are autonomous adaptation help to improve resilience of farmers? Insights from local scale analysis from South India

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10. Developing web services to foster the adaptation of agriculture, forestry and water management to climate change

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11. Evaluation of GHGs, C stocks and yields from European cropping and pasture systems under two climate change scenarios

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12. Food security and climate change: a vulnerability analysis of agricultural livelihoods in Central America

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13. Impact of climate change on household income and poverty levels: empirical evidence from South Asia

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14. Irrigated rice practices changes in the Senegal River Valley according to climate and constraints evolutions

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15. Towards high resolution adaptation strategies to climate variability and change

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16. AgMIP's transdisciplinary approach to regional integrated assessment of climate impact, vulnerability & adaptation

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17. Representative agricultural pathways for integrated assessment of climate change, vulnerability & adaptation impacts

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18. Trends in dry spell and extreme rainfall events and significance for alternative and sustainable agriculture in Malawi

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19. Analysing the quality and reconstructing daily weather data for crop growth simulation models

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20. Gender assessment of climate change adaptation strategies in south-western Nigeria

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21. Sensitivity analysis for climate change impacts, adaptation and mitigation projection with pasture models

Bellocchi Gianni[1], Ehrhardt Fiona[2], Soussana Jean-François[2], Conant Rich[3], Fitton Nuala[4], Harrison Matthew[5], Lieffering Mark[6], Minet Julien[7], Martin Raphaël[1], Moore Andrew[8], Myrgiotis Vasileios[9], Rolinski Susanne[10], Ruget Françoise[11], Snow Val[12], Wang Hong[13], Wu Lianhai[14]
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22. Biochar: an environment friendly approach to mitigate climate change

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23. Response of fine rice cultivars to various transplanting dates under climate change scenario of Pakistan

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24. Climate smart services: case studies in Senegal, Burkina, and Colombia

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25. Climate-smart cropping patterns on exposed coasts and near-coastal uplands, central Vietnam

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26. Adoption of climatic challenges mitigating strategies at farm level: empirical evidence from South Asia

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27. Can ecosystem-based adaptation help smallholder farmers adapt to climate change?

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28. ITK Vigne, a decision-support tool to adapt wine production to climate change, with or without irrigation

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29. QUICKScan: A decision support tool for a participatory exploration of land use mitigation and adaptation options

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30. Gender specific perceptions and adoption of the climate-smart Push-pull technology in eastern Africa

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31. Critical issues for the design and operation of business models for technological CSA innovations

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32. Building resilience to climate change: the role of robust methods

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33. Co-design of scenarios and adaptation strategies to climate change in the highlands of Madagascar

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34. Climate change adaptation in the dry zone of Honduras: learning by doing

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35. From plot to regional scale, spatial modelling of crop systems using interaction graphs

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36. Climate Smart Agriculture, mitigation and adaptation, agro biodiversity conservation in Georgia

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37. Sensor-aided conservation agriculture: climate smart nitrogen and weed management in maize-wheat system

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38. Climate Change from the lens of a smallholders and their landscapes

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39. Assessing the vulnerability of sorghum to changing climate conditions in West Africa semi-arid tropics

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40. Network of experiments to phenotype contrasted sorghum and to model its adaptability in West African environments

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41. e-Agro Climate Initiatives - Ghana

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42. Climate-smart, site-specific agriculture: reducing uncertainty on when, where and how to grow rice in Colombia

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43. Microclimate drives pests in complex agricultural landscapes: how to monitor and analyse fine-scale climate data?

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44. Enhancing women farmers' access to climate smart technologies through participatory approach in rice farming households

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45. Assessment of community based biodiversity management for adaptation to climate change in Kaski district, Nepal

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46. Degradation of forest and agricultural resources and adaptation strategies in Middle Casamance (Senegal)

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47. Climate change and adaptation strategies of households as threats to food security in rural Southwest Nigeria

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48. Analysis of the adaptive capacity of rural farm households to climate change risks In Nigeria

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L3.2 Climate-smart cropping systems

49. Climate smart village model for climate change adaptation and mitigation:

implications for smallholder farmers in Ghana

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50. Agro Climate Calendar, a simple methodology to identify local adaptation for farm objectives

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51. Drip system and climate change adaptation

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52. Comparison of methodological approaches for durum wheat in-field monitoring and early-yield prediction

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53. Increasing vegetable research investments in South Africa for climate-smart vegetable research

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54. Improving farmers' innovation capacity for climate-smart forest and agricultural practices in Bangladesh

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55. Finding niches for neglected crops in the semi-arid to better manage climate risk under smallholder farm conditions

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56. Reducing the use of nitrogen fertilizers: how and what potential impact on N2O emissions from French agriculture?

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57. Climate Smart agriculture: farmers' perception and practices in Nepal

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58. The FACCE-ERA-NET+ project Climate–CAFÉ: climate change adaptability of cropping and farming systems for Europe

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59. Climate smart agriculture: Towards a concerted definition of national priorities in Mali

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60. New crops for a new climate: understanding farmers' behavior towards sesame and cowpea crops in Sahel

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61. Climate change and rainfed agriculture: how to extend the campaign and improve the Burkinabe agricultural production?

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62. Evolution of the rainy season and peasant adaptation in the Northeast of Benin (West Africa)

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63. Fitting sweet potato into low input cropping systems within contrasting agro-ecologies of KwaZulu-Natal, South Africa

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64. Study of sequestration of soil organic carbon under conservation agriculture and choice of simulation model

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65. Integrated approaches to adaptation to climate change and food security in Maradi (Southern Niger)

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66. Can woody plants management provide soil amendments to enhance agroecosystem productivity and resilience in West Africa?

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67. Dynamic capacity of the adaptability of steppe sheep breeding systems in response to the challenge of climate change

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68. Do practices of Sahelian smallholder farmers impact native agroforestry shrubs functioning?

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69. STICS: a generic and robust soil-crop model for modelling agrosystems response in various climatic conditions

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70. A model assessment of the adaptation of Mediterranean agroforestry systems to climate change

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71. The effect of organic amendments and water pulses on GHG emissions from rice production systems using δ13C isotope

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72. Nurse plant effect on mycorrhizal soil infectivity and soil fertility restoration in Madagascar upland rice farming

Baohanta Rondro[1], Randriambanona Herizo[1], Andrianandrasana M. Doret[3], Razakatiana Adamson T.[3], Razananirina Jefferson[3], Rajaonarimamy Elinarindra[3], Ducousso Marc[2], Duponnois Robin[2], Ramanankierana Heriniaina[1]
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73. Extension of oil palm in altitude under global change in North Sumatra: ecophysiological responses and yield

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74. Impact of climate on major cereal crops production in Sokoto State, Nigeria

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75. Resource-conserving agriculture for restoring soil productivity and climate change mitigation in northern Ethiopia

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76. Millet (Pennisetum glaucum)-acacia association for sustainable improvements in agricultural productivity in Niger

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77. Collection of farming address climate changes in the department Kaolack / Senegal

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78. Mitigating methane emission in rice ecosystem by drip irrigation

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79. Eating more grain legumes and less meat promotes climate smart cropping systems

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80. Acacia catechu trees in rice fields: a climate smart traditional agricultural system of Northern Bangladesh

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81. Soil carbon sequestration under traditional management of smallholder's oil palm plantations in Sudano-Guinean context

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82. Impact of climatic variables on rice yield in Bangladesh: a spatio-temporal analysis

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L3.3 Climate-smart livestock

83. Productivity and mitigation effects of alternative feeding practices in smallholder dairy farms in the north of Vietnam

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84. Building climate smart pastoralism in the Sahel: ways forward

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85. Climate and animal diseases: the case of 2009/2010 rift valley fever outbreaks in South Africa

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86. Cattle ranching in the Amazon: quantifying synergies between intensification, mitigation and profitability

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87. Potential multi-dimensional impacts and tradeoffs of improved livestock feeding scenarios in Babati, Tanzania

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88. Towards climate smart dairy cattle in Rwanda: mapping feed resource potential under climate and land use scenarios

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89. Protein supplementation improves saline water utilization in lambs

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90. An optimal live-weight gain in winter improves growing performance and reduces CH_4 in tropical beef cattle systems

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91. Global farm platforms for sustainable ruminant livestock production

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92. Climate change, livestock productivity and poverty: empirical evidence from south Asian countries

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93. Solutions for greenhouse gases mitigation in ruminant farming: how to favor their adoption?

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94. Perception of climate change and adaptation of herd conduct mode in Burkina Faso during rainy season

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95. Mini-livestock ranching – raising climate-smart insects for nutrition and livelihoods

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96. Evaluating animal mobility in relation to climate change mitigation: Combining models to face methodological challenges

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97. Substitution of maize silage with barley silage in dairy cow diet as mitigation strategy: effect on milk quality

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98. Towards climate smart livestock systems in Tanzania: assessing opportunities to meet the triple win

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99. Predicting effects of cattle growth promoting technologies on methane emissions using TAURUS ration formulation software

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100. Farm scale greenhouse gas budget; grazing is smart

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101. Effect of ambient temperature on lactating sows, a meta-analysis and modeling approach

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102. Greenhouse gas and ammonia emissions from ceramsite covered compared with uncovered during dairy slurry storage

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103. Grass-legume mixtures enhance nitrogen yield over a wide range of legume proportions and environmental conditions

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104. Classifying livestock systems for public policy guidance: the example of Colombia's livestock sector

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105. Influence of xylanase enzyme on in vitro methane production and rumen fermentation of tikiya (Eleocharis dulcis)

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106. The effect of sunflower oil and the phenolic essential oils on methane emission in dairy cattle

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107. Utilization of saline water by Barbarine lambs in the dry areas under climate change

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108. Impact of feeding and breeding interventions towards climate resilient dairying system in India

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L3.4 Climate-smart landscapes, watersheds and territories

109. Large-scale land restoration – creating the conditions for success

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110. Regional impacts of climate change and adaptation through crop systems spatial distribution: the VIGIE-MED project

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111. Interdisciplinary approach to climate change in an intensely-managed agricultural landscape in California, USA

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112. Building a shared representation of the landscape as a socio-ecological system and visualizing the challenges of CSA

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113. Climate-smart territory approach: for an effective address of Climate Smart Agriculture

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114. Landscape scale assessments for strategic targeting of climate smart agriculture practices in East Africa

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115. The FACCE-ERA-Net Plus project "Climate smart Agriculture on Organic Soils" (CAOS)

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116. The potential of fish as a climate smart adaptation and mitigation strategy

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117. Water uptake in deep soil layers by tropical eucalypt plantations: consequences for water resources under climate change

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118. Land use practices among pastoralists as potential climate smart options for dry land ecosystems.

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119. Spatial models of farms territories, policy instrument and climate change: application in Chorotega (Costa Rica)

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120. Landscape management to develop agroforestry in Central-Africa

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121. Governance for climate smart landscapes: a case from Makueni County, Kenya

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122. A landscape approach to co-designing climate change adaptation and mitigation strategies with farming communities

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123. Adapting landscape mosaics within Mediterranean rainfed agrosystems for managing crop production, water & soil resources

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124. Watershed and biodiversity restoration in the Western highlands of Cameroon under climate change

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L3.5 Investment opportunities and funding instruments

125. Livestock farmers' investment toward climate-smart production: impact of an incentive program in Chorotega, Costa Rica

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126. 25 million African farming families by 2025: science-development partnerships for scaling climate-smart agriculture

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127. Microfinance and Climate Smart Agriculture: integrated farming system and social business

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128. The CLIFF Network: breaking knowledge barriers for climate change mitigation research in developing countries

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129. Community Based Crop Insurance for Climate Risk Management

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130. Adaptation strategies for floodplain agriculture in Amazonia

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131. Afforestation and the unemployment nexus in the West African forest reserves localities: case study of Nigeria

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